1	NEAL R. GROSS & CO., INC.
2	RPTS SALANDRO
3	HIF249180
4	
5	
6	PERFLUORINATED CHEMICALS IN THE ENVIRONMENT:
7	AN UPDATE ON THE RESPONSE TO CONTAMINATION
8	AND CHALLENGES PRESENTED
9	THURSDAY, SEPTEMBER 6, 2018
10	House of Representatives
11	Subcommittee on Environment
12	Committee on Energy and Commerce
13	Washington, D.C.
14	
15	
16	
17	The subcommittee met, pursuant to call, at 10:00 a.m.,
18	in Room 2123 Rayburn House Office Building, Hon. John Shimkus
19	[chairman of the subcommittee] presiding.
20	Members present: Representatives Shimkus, Upton,
21	McKinley, Olson, Johnson, Flores, Hudson, Walberg, Carter,
22	Duncan, Walden (ex officio), Sarbanes, Welch, Tonko, Ruiz,
23	Peters, Green, McNerney, Cardenas, Dingell, and Pallone (ex NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS

24	officio).
25	Staff present: Samantha Bopp, Staff Assistant; Daniel
26	Butler, Legislative Clerk, Health; Karen Christian, General
27	Counsel; Kelly Collins, Legislative Clerk,
28	Energy/Environment; Margaret Tucker Fogarty, Staff Assistant;
29	Ali Fulling, Legislative Clerk, Oversight & Investigations,
30	Digital Commerce and Consumer Protection; Drew McDowell,
31	Executive Assistant; Brannon Rains, Staff Assistant; Mark
32	Ratner, Policy Coordinator; Annelise Rickert, Counsel,
33	Energy; Peter Spencer, Senior Professional Staff Member,
34	Energy; Madeline Vey, Policy Coordinator, Digital Commerce
35	and Consumer Protection; Elizabeth Ertel, Minority Office
36	Manager; Jourdan Lewis, Minority Staff Assistant; John
37	Marshall, Minority Policy Coordinator; Tim Robinson, Minority
38	Chief Counsel; and Tuley Wright, Minority Energy and
39	Environment Policy Advisor.

40 Mr. Shimkus. If I can ask all our guests today to please take their seats. The Subcommittee on Environment 41 42 will now come to order. The chair recognizes himself for 5 minutes for an opening statement. All right, let's quiet 43 44 down. 45 Good morning. Today's hearing focuses on a class of 46 emerging environmental contaminants that are highly 47 fluorinated chemicals. Technically known as perfluorinated 48 polyfluoroalkyl substances, they are more commonly referred 49 to by their acronym, PFAS. 50 PFAS is a group of man-made chemicals numbering in the 51 thousands that have been manufactured and used in a variety 52 of industries around the globe. These chemicals have been 53 used to make coatings and products that are widely used by 54 consumers due to their oil and water repellent 55 characteristics. 56 Items containing PFAS include food packaging like pizza 57 boxes and microwave popcorn bags and in non-stick products 58 like Teflon as well as polishes, waxes, paints, and cleaning products. The chemicals also serve to make components of 59 firefighting foams and mist suppressants from metal plating 60 61 operations. The military uses them in foam to extinguish 62 explosive oil and fuel fires.

PFAS are considered emerging contaminants because
today's advanced analytical technology is increasingly
detecting their presence in the environment and there isn't a
great of toxicology data on many of these substances, meaning
that we don't know enough to say how risky each PFAS chemical
is or what the exact impact of exposure to these substances
will be for each person.
In truth, while we are only on the front end of the
understanding how they move in the environment or their
effect on the environment and public health, what we do know
is that because of their unique properties and vast usage,
most people have come into contact with at least one PFAS.
In addition, studies on a few PFAS chemicals suggest those
chemicals might cause health problems for humans. And, these
PFAS chemical appear to be very persistent in the environment
and in the human body, meaning they don't break down.
In the past few years, public anxiety about PFAS
detection and uncertainty about what to do about it has
grown. News reports have highlighted several communities,
near military bases or facilities making PFAS, have
discovered these chemicals in their drinking water.

means taking stock of what the government knows about PFAS,

This hearing is about starting the dialogue on PFAS.

what efforts to contain its contamination have promise, and what is preventing people from being helped with cleanup or avoid contamination of their air, soil, and water. It is time to figure out what can be done right now and what needs to be done to respond appropriately to legitimate risks created by PFAS contamination in the environment.

I understand that in 2016 EPA established health advisories for certain PFAS chemicals to provide drinking water system operators and state, tribal, and local officials with information on health risks of these chemicals. In addition, in May of this year, EPA kicked off a national PFAS effort. We welcome back the committee, Dr. Grevatt, the unofficial EPA PFAS czar who will walk us through EPA's ongoing as well as future plans for addressing PFAS.

We also will hear from the Department of Defense because the various branches of the military have often used these chemicals for fire suppression and now many military installations are faced with significant issues concerning PFAS contamination. We welcome Mr. Niemeyer, the Department Assistant Secretary of Energy, Installations, and Environment — that is not right — Ms. Sullivan, who will talk us through what DOD is doing to tackle this issue.

For the critical state perspective, which represents the

109 front lines for addressing the issue, we will hear from our friends in the state drinking water and solid waste agencies. 110 We welcome back Ms. Daniels who is here on behalf of the 111 112 Association of State Drinking Water Administrators, and Mr. 113 Sandeep who is here on behalf of the Association of State and 114 Territorial Solid Waste Management Officials. 115 Without stealing from my colleagues from Michigan and 116 their thunder, I also want to welcome Ms. Isaacs from the 117 Governor's Office in Lansing. She is the official Michigan 118 PFAS czarina and it will be good to understand her state's 119 work in this area. 120 And with that I would like to yield to Mr. Hudson for 121 the remaining of my time. Mr. Hudson. Thank you, 122 Chairman Shimkus and Ranking Member Tonko. I appreciate you 123 holding this hearing today on PFOS and PFAS chemicals. 124 issue remains a top priority for me and I am looking forward 125 to hearing from our witnesses today. 126 I want to thank the EPA for agreeing to testify so we 127 can continue to learn more about these chemicals. 128 recently accepted an invitation to hold its third community engagement summit in my district. Dr. Grevatt, I look 129 130 forward to hearing from you and what you have learned at that summit as well as discussing what plans EPA has to release a 131

132 public health advisory specifically for GenX. 133 I also want to thank Emily Donovan, a former North 134 Carolinian, who will be testifying on our second panel. often we are focused on the technical sides of these issues 135 136 and forget at the end of the day we are talking about real 137 people. So I look forward to Emily's testimony that will put 138 a human face on this issue, Mr. Chairman. 139 And with that I yield back. 140 Mr. Shimkus. The gentleman yields back his time. 141 chair recognizes the gentleman from New York, my good friend 142 Mr. Tonko, for 5 minutes. 143 Mr. Tonko. Thank you, Mr. Chair, and welcome to our 144 quests, including the czars and czarina. So, it is awesome 145 to have you here. 146 Seventy parts per trillion, per trillion -- it is hard 147 to even fathom that amount -- drops in an Olympic-sized 148 swimming pool, but that is the health advisory level 149 established by EPA for lifetime exposure to PFOA and PFOS in 150 drinking water. When we discuss other serious drinking water 151 contaminants we often deal in parts per billion. 152 perchlorate and other dangerous contaminants are considered 153 on a scale order of magnitude larger than PFOA. That gives 154 you a sense of how toxic this class of chemicals is.

After a number of high profile incidents in 2016, EPA significantly lowered its health advisory level from 400 parts per trillion to 70. Since then, we have seen some states set standards lower than 70 parts per trillion, and the press has reported what appears to be political interference that sought to delay a CDC toxicity study which suggests that these substances are dangerous at even lower levels than previously stated by EPA.

Clearly, we have issues with risk communication. So I understand the frustration felt by individuals and communities that do not know who to trust. Perfluorinated

understand the frustration felt by individuals and communities that do not know who to trust. Perfluorinated substances, collectively known as PFAS, have been linked to cancer, to thyroid disease, and other serious health problems. These compounds such as PFOA, PFOS, and GenX have been used for industrial purposes including cookware, food packaging, and firefighting foam.

We know PFAS are toxic, bioaccumulative, and stick around in the environment for years to come. We know almost all Americans have had some PFAS exposure and we know drinking water contaminations are being found in communities across our country. Research from Environmental Working Group estimated PFAS contamination in the water supplies of 15 million, 15 million Americans. Due to how these chemicals

are monitored the number is likely underestimated.

Under the EPA's Unregulated Contaminant Monitoring Rule, or UCMR, from 2013 to 2016, all U.S. public water systems serving 10,000 or more customers tested their supplies for PFOA, PFOS, and other similar compounds, but as it is UCMR is not adequate. It only covered six PFAS out of thousands within this chemical class that have been found in products or the environment.

About 50 million Americans are served by water systems that were not required to test for these PFAS at all, and 15 percent of Americans rely on private wells which are not covered by any EPA drinking water standards or testing requirements. Communities nearby my district are dealing with the consequences of contamination. Hoosick Falls, New York, in Upstate New York, only discovered they had a problem after a private citizen tested his water.

I want to stress that communities like Hoosick Falls and Newburgh in Upstate New York and the dozens and dozens of others are not unique and the elevated rates of cancer and unusual diseases are surely not a coincidence. It should not and cannot fall upon every private citizen to test the water only after a loved one passes away from kidney cancer. This is why we have national protective standards that require

201 monitoring and treatment for dangerous common contaminants. 202 We need EPA action on an enforceable standard, but without such action this committee has made efforts to ensure more 203 204 widespread monitoring of PFOA and PFOS. 205 In the Drinking Water System Improvement Act passed by 206 the committee last year, we would require water systems 207 serving more than 3,300 people to test for unregulated 208 contaminants, a vast improvement over that 10,000. 209 Unfortunately, this does not help people served by the 210 smallest systems or private well, but it is a start. 211 Mr. Chair, we should continue to look into additional 212 ways to improve testing and monitoring. Today is a great 213 opportunity for us to learn what EPA and state governments 214 are doing to address the growing course of concerns from 215 scientists and private citizens about the risks posed by 216 I hope we will hear that EPA is exploring all 217 regulatory options available and plans to act expediently. 218 But even on the most aggressive timeline, regulatory 219 action will likely take years, so we must consider what can be done right now to identify contaminations, prevent 220 221 exposure, and expedite cleanups. 222 We are also joined today by the Department of Defense. For decades, aqueous film-forming foam, a firefighting foam 223

that contains PFAS, has been used by DOD and commercial airports. In communities where PFAS are not manufactured, ground water contamination has often been traced to a nearby DOD installation where these firefighting foams have been used. Communities near these bases and industrial facilities did not sign up for this risk and deserve, deserve clean water.

DOD must step up and make it right. We know the cost of remediation can be expensive and the health consequences of exposure can indeed be fatal. Ultimately, we must hold polluters accountable to clean up and make the communities and families that have suffered from this pollution whole again. And yes that standard must apply to our United States Department of Defense.

Mr. Chair, I am grateful that you have called this hearing today. I expect we will learn a lot about the options of EPA, DOD, states, and communities to protect people from these dangerous contaminants. But a hearing is not enough. I firmly believe there is a need for legislation to ensure that adequate testing, monitoring, remediation, and protection is occurring, and this can best be guaranteed if Congress requires EPA to take the steps necessary to make a determination on a maximum contaminant level in addition to

247	other potential protective actions.
248	I believe there are legislative proposals that would
249	have bipartisan support and I hope we can continue to look
250	into this issue based on today's conversations. With that
251	Mr. Chair, I yield back. Mr. Shimkus. The gentleman yields
252	back his time. We can tell by the length of the statement
253	that Jackie has returned, so welcome back.
254	The Chairman. Swing and a hit.
255	Mr. Shimkus. The chair now recognizes the chairman of
256	the full committee, Chairman Walden, for 5 minutes.
257	The Chairman. Thank you, Mr. Chairman. I appreciate
258	you holding this hearing. It is really, really important
259	work and I know many of our colleagues on the dais Mr.
260	Hudson, Mrs. Dingell, Mr. Upton and others have been very
261	involved in this.
262	On my way back to Washington at the end of last week, I
263	went at Mr. Upton's request to Michigan to learn more
264	firsthand from him about this horrible situation in his
265	district and state. And I think it is really important we
266	got right on this hearing. I appreciate everybody's input.
267	You know, we are going to do three things here today.
268	First, is we need to increase our understanding of what the
269	government knows or doesn't and establish what the public

should know about the risks, how confident they should be in that information, and the best ways to prevent unhealthy exposure to these chemicals.

Second, we need to explore what can be done right now to address contamination by these substances based on what we do know starting with the practical steps that may be taken to reduce risk from contamination. And third purpose of the hearing, it should help develop an outline for a more sustained strategy to fill important information gaps, identify any longer terms challenges, and set realistic expectations for results based on science and risk-informed decision making.

And that is why we have our witnesses today who can help us in this effort. I want to thank Chairman Shimkus for assembling these two very good panels of witnesses. They have important knowledge not only on the complicated nature of PFAS contaminated sites and the state of the science on these contaminates, but also on policy.

I know EPA announced a more comprehensive PFAS plan this past May and have been traveling the country to hear from people impacted by PFAS contamination. And we look forward to hearing what EPA ranks PFAS exposure in terms of other environmental and public threats that are facing us and how

the federal government plans to try to tackle the issues associated with PFAS chemicals including around Defense Department sites.

And we look forward to learning about the technical and economic barriers that states and communities face in dealing with this contamination. We have seen these sorts of things before in America. We know how difficult they can be and deadly they can be in various examples in the past including at Department of Defense sites. I think of Hanford in my region and the waste that is there from World War II we are still trying to clean up, and other things that have occurred around the country.

So I appreciate our panel being here. I appreciate this hearing. I am going to yield the balance of my time to the former chairman of this committee, nobody who has worked harder on this issue -- got on it right away with Governor Snyder -- than Fred Upton. So, Mr. Upton, I would yield the balance of my time to you.

Mr. Upton. Well, thank you, Mr. Chairman. And I want to particularly thank you too, Mr. Chairman Shimkus, not only for this hearing this morning, but also for your great work in the last Congress to pass TSCA legislation, something that passed this committee when I was chairman, on a unanimous vote thanks to your leadership, and really provided the EPA the authority to begin to look at all these somewhat unregulated chemicals for the first time in 40 years. And had that not happened we probably wouldn't be here today. So that work really paid off.

Let me just share with you a couple things at what happened when I went back to Michigan beginning the August

happened when I went back to Michigan beginning the August break. I literally was just off the plane on my way home when I got a call from my state senator, Margaret O'Brien, and she said, Fred, I have really bad news. We just got the results from a small city in my district, Parchment, and they are 20 times the standard for PFOS and we are assembling a meeting yet tonight, we want you to come.

And so I went to the other end of my district, it was not a problem, and we spent about 5 or 6 hours there that night. We had a conference call with the state with every player of any importance to figure out what we should do.

And we praised the media, because this particular town

doesn't have the system on their cells even though earlier in the week here in Washington we got a weather alert that everyone's cell phone buzzed, take cover, flooding, et cetera, we didn't have that ability to do that in Parchment.

But we knew at 1,400 parts per trillion, 20 times the standard that they should not be using that water right away. People were ready to go door-to-door to tell folks in this small community don't put the water out for your pet, don't use it for infant formula, don't make it for coffee in the morning, don't -- just disconnect your icemaker, no water for cooking, and thanks to the media, particularly Channel 3 and Channel 8, they came out with radio stations and the word was out right away to stop.

And for a month we literally were giving bottled water to everyone in those two communities, City of Parchment and Cooper Township. That water just got turned on last week and when they were able to connect with the City of Kalamazoo to hook up. But you still have a good number of private wells and others that are in trouble because that level is too high.

So as the Governor said, this is a textbook case of what ought to happen, getting the word out, trying to figure out what is the next step, but immediately take care of the

357	residents that were there. So I want to praise so many
358	people on the ground.
359	I know that we have a good panel, a couple panels here
360	ahead of us. I look forward to the questions. But, Mr.
361	Chairman, I appreciate you taking this hearing up literally
362	the first week that we are back so that we can better
363	understand this and help other communities that yes will be
364	on the same path as Parchment and Cooper Township in the
365	future. I yield back.
366	Mr. Shimkus. The gentleman yields back his time. The
367	chair recognizes the ranking member of the full committee,
368	Mr. Pallone, for 5 minutes.
369	Mr. Pallone. Thank you, Mr. Chairman. PFAS
370	contamination is a very serious issue affecting communities
371	nationwide. We will hear today from some of those
372	communities and I urge my colleagues to listen closely to the
373	firsthand accounts of the harm these chemicals can cause.
374	These health issues include multiple types of cancers,
375	impaired childhood development, reproductive issues, hormone
376	disruption, increased cholesterol levels, and immune system
377	issues. And Americans across this country are being injured
378	right now by these chemicals and it seems that more affected
379	communities are being discovered all the time.

This hearing is a good start but the communities affected by PFAS contamination need more than just a hearing. They need real solutions and real action from the EPA and the DOD. The impacted states need more than just summits and enforceable advisories. We need a binding, enforceable, and strong drinking water standard.

Democrats on this committee have been pushing to set a deadline to promulgate a strong drinking water PFAS standard for several years and recently we have heard calls for alternative approaches to address these chemicals from communities and experts who don't believe EPA's regulatory process under the Safe Drinking Water Act will actually work, and it isn't hard to see why.

In 2016, the EPA released a health advisory for two chemicals in this category at 70 parts per trillion. We know this level is too high to protect public health. States have known it for years and have set their own standards much lower, yet millions of Americans currently receive water that exceeds even this weak standard and the problem is spreading.

The more water systems we test for PFAS, the more contamination we find. Earlier this year, the Agency for Toxic Substances and Disease Registry drafted a report identifying hazardous effects well below the EPA health

advisory standard. Instead of acting on this information to protect the public health, the EPA and the White House worked to block publication of the report.

And the Trump administration feared the potential public relations nightmare more than public health nightmare facing many communities today, so this is yet another outrageous example of the Trump administration ignoring the health needs of the American people. And we have seen these delay tactics before, particularly with another drinking water contaminant spread by the Department of Defense, namely perchlorate.

Next month will mark a decade since EPA determined that a drinking water standard for perchlorate was needed and we still have yet to see a proposed rule. So some may say that these troubling actions show that the Safe Drinking Water Act won't work, but I think Congress can make it work. Congress should play a central role in setting the timeline for developing the PFAS drinking water standard and ensuring that the standard is truly protective of public health. And I hope this hearing is a sign that committee Republicans are finally beginning to share this view.

Additional actions under other environmental laws may be needed to fully address this contamination and support these communities, so I hope this subcommittee can work together

426 quickly to address PFAS contamination and implement some of 427 the solutions that we will hear about today. 428 And I would like to yield the remainder of my time to 429 the gentlewoman from Michigan, Mrs. Dingell. Mrs. Dingell. 430 Thank you, Mr. Chairman, and thank you to Chairman -- well, I 431 meant Ranking Member, but thank you, Chairman Shimkus and 432 Ranking Member Tonko, for holding this important hearing 433 today to discuss and highlight the growing presence of 434 harmful perfluorinated chemicals being discovered across the 435 country. 436 You know, there is a old saying that says nothing lasts 437 Unfortunately, nothing that is except for 438 fluorinated chemicals which were designed to stand the test 439 These chemicals, their dangers already having been of time. 440 laid out by my colleagues can be found all around us, and in 441 recent years we have seen more and more cases of confirmed 442 contamination sites in the environment and drinking water 443 sources, especially across Michigan. 444 And like my colleague, Mr. Upton, we too found very 445 dangerous levels in fish in the Huron River and have had the same crisis during the month of August. As we continue to 446 447 test for PFAS I fear that this is only the beginning, the trend is going to continue. PFAS are man-made and will 448

449	require a man/woman-made solution from all of us working
450	together, every federal agency, every state and local
451	official and Congress needs to immediately take this issue
452	seriously.
453	I look forward to working with everyone on this
454	committee and my colleague, Mr. Upton, and I, who will be
455	shortly introducing legislation. Thank you and I yield back.
456	Mr. Shimkus. The gentleman yields back his time and the
457	chair thanks the individuals.
458	We want to thank all our witnesses for being here today
459	and taking the time to testify before this subcommittee.
460	Today's witnesses have the opportunity to give opening
461	statements followed by a round of questions from members.
462	Our first witness panel for today's hearing includes Dr.
463	Peter Grevatt, Director, Office of Groundwater and Drinking
464	Water, U.S. Environmental Protection Agency, and Ms. Maureen
465	Sullivan, Deputy Assistant Secretary of Defense for
466	Environment, U.S. Department of Defense.
467	We appreciate you being here today. We will begin the
468	panel with Dr. Grevatt and you are now recognized for 5
469	minutes for your opening statement. Thanks for being back
470	and joining us.

STATEMENTS OF PETER GREVATT, DIRECTOR, OFFICE OF GROUNDWATER 471 472 AND DRINKING WATER, U.S. ENVIRONMENTAL PROTECTION AGENCY; 473 AND, MAUREEN SULLIVAN, DEPUTY ASSISTANT SECRETARY OF DEFENSE 474 FOR ENVIRONMENT, U.S. DEPARTMENT OF DEFENSE. 475 476 STATEMENT OF PETER GREVATT 477 Mr. Grevatt. Good morning, Chairman Shimkus, Ranking 478 Member Tonko, and members of the subcommittee. I am Peter 479 Grevatt, Director of the Office of Groundwater and Drinking 480 Water at the U.S. Environmental Protection Agency. 481 serve as chair of EPA's cross-agency efforts to address per 482 and polyfluoroalkyl substances, or PFAS. Thank you for the 483 opportunity to testify today. 484 Protecting America's drinking water is one of EPA's top 485 priorities and I am here today to share with you the actions 486 the Agency is taking to address PFAS. PFAS are a group of 487 man-made chemicals that have been in use since the 1940s and 488 PFAS are or have been found in a wide array of consumer 489 products and as an ingredient in firefighting foam. 490 PFAS manufacturing and processing facilities, airports, 491 and military installations are some of the contributors of PFAS releases into the air, soil, and water. Because of 492

their widespread use, most people have been exposed to PFAS

and there is evidence that exposure to certain PFAS may lead to adverse health effects. EPA has taken steps under its various statutory authorities to understand and address these chemicals. For example, under the Toxic Substances Control Act, the Agency has issued various significant new use rules for certain PFAS chemicals to guard against their reintroduction into new use or new use with prior EPA review.

Under the Safe Drinking Water Act, which my office oversees, EPA has also monitored for six PFAS to understand the nationwide occurrence of these chemicals in our drinking water systems and in 2016, EPA issued drinking water lifetime health advisories for two well-known PFAS compounds, PFOA and PFOS, of 70 parts per trillion.

EPA is also working to move research forward on PFAS to better understand their health impacts, options for treatment, and how information on better known PFAS compounds can be applied to inform our knowledge of other PFAS. To build on these actions, EPA hosted a PFAS National Leadership Summit in May of 2018. The summit provided an opportunity for participants to share information on ongoing efforts, to identify specific near-term actions, and to address risk communication challenges.

At the event, EPA committed to work on four significant

actions: First, to initiate the steps to evaluate the need for a maximum contaminant level for PFOA and PFOS; second, to begin the necessary steps to consider designating PFOA and PFOS as hazardous substances; third, to develop groundwater cleanup recommendation for PFOA and PFOS at contaminated sites; and lastly, to develop draft toxicity values for the PFAS compounds GenX and PFBS.

EPA also continues to provide support to states, tribes, and communities who are addressing PFAS issues. As EPA takes these actions, the Agency is also committed to working with our federal partners including the Department of Defense and the Department of Health and Human Services. We look forward to continuing our interagency dialogue and collaboration.

Additionally, EPA recognizes the need to hear from citizens. Since June, EPA has traveled to five states across the country to hear directly from impacted communities and these experiences have been invaluable and community feedback will now shape how we move forward. EPA will consider information from the National Leadership Summit, the community engagements, and the public docket to develop a PFAS Management Plan.

Protecting public health is EPA's top priority. Acting Administrator Wheeler has expressed his continued commitment

540	to considering actions on PFAS so that EPA can lead efforts
541	that meet the needs of impacted communities.
542	Once again Chairman Shimkus, Ranking Member Tonko, and
543	members of the subcommittee, thank you for the opportunity to
544	discuss PFAS. I look forward to answering any questions you
545	may have.
546	[The prepared statement of Mr. Grevatt follows:]
547	
548	********INSERT 1******

549	Mr. Shimkus. Thank you very much.
550	We next turn to Ms. Maureen Sullivan. Your full
551	statement is in the record. You have 5 minutes.

STATEMENT OF MAUREEN SULLIVAN

Ms. Sullivan. Chairman Shimkus, Ranking Member Tonko, and distinguished members of the subcommittee, I am Maureen Sullivan, the Deputy Assistant Secretary of Defense for Environment. My portfolio includes policy and oversight of DOD's programs to comply with environmental laws such as the Safe Drinking Water Act and the Comprehensive Environmental Response Compensation and Liability Act, CERCLA. That is a mouthful.

I want to thank Congress for your strong support for the Department of Defense, our national security priorities, and for funding that we need to protect our nation. Ensuring the health and safety of our service members, the families living on our installations, and the surrounding communities is one of our top priorities.

I want to thank this committee for the opportunity to discuss the establishment of a national approach to per and polyfluoroalkyl substances, PFAS. We believe DOD has been leading the way to address these substances. One commercial product that contains PFOS is aqueous film-forming foam, or AFFF. This highly effective firefighting foam has been used by the Department of Defense, commercial airports, local fire

departments, and the oil and gas industry. However, it only accounted for approximately three to five percent of the PFOS production in calendar year 2000.

And the Department of Defense is just one of the many users of the foam. DOD has committed substantial resources in the last 2 years and taken significant actions to respond to the concerns from PFOS and PFOA. When EPA issued the lifetime health advisory for PFOS and PFOA in 2016, the Department quickly acted to voluntarily test our 524 drinking water systems that serve approximately two million people on our installations worldwide. Twenty four of these systems tested above EPA's LHA level.

Although it is only an advisory, DOD followed EPA's recommendations to include providing bottled water or additional water treatment at those locations. CERCLA provides consistent approach across the nation for cleanup. The Defense Environmental Restoration Program statute provides authorities to DOD to perform and fund actions and requires they be carried out in accordance with CERCLA.

The first step is to identify the source of known or suspected releases. The Department of Defense has identified 401 active and Base Realignment and Closure installations with at least one area where there is a known or suspected

release of PFOS or PFOA. The Military Departments then determined whether there was exposure through drinking water and, if so, the priority is to cut off human exposure where drinking water exceeds EPA's lifetime health advisory. Once the exposure pathway is broken, the Military Departments prioritize the sites for further action using the longstanding CERCLA risk-based process, worst first.

These known and suspected PFOS and PFOA release areas are in various stages of assessment, investigation, and cleanup. To prevent further releases to groundwater, DOD issued a policy in January of 2016 requiring the Military Departments to prevent uncontrolled, land-based AFFF releases during maintenance, testing, and training activities. The policy also requires the Military Departments to remove and properly dispose of supplies of AFFF containing PFOS other than for shipboard use.

Currently, no fluorine-free version of AFFF meets the military's stringent performance requirements to extinguish petroleum fires. From fiscal year 2017 to fiscal year 2019, we solicited research products to identify and test the performance of fluorine-free AFFF. These efforts support DoD's commitment to finding an AFFF alternative that meets critical mission requirements while protecting human health

621	and the environment and will represent at least \$10 million
622	in research and development funding.
623	In summary, DOD is taking actions to reduce the risks.
624	We are committed to mitigating PFOS and PFOA releases to the
625	environment that are a direct result of DOD activities. We
626	are making significant investments in a fluorine-free AFFF.
627	These combined efforts reinforce DOD's commitment to meeting
628	critical mission requirements while protecting human health
629	and the environment. Thank you very much.
630	[The prepared statement of Ms. Sullivan follows:]
631	
632	**************************************

633	Mr. Shimkus. The chair thanks the gentlelady.
634	We now conclude with the opening statements from our
635	panel and we would like recognize members for their round of
636	questions. And we would like to start by recognizing myself
637	for 5 minutes, and this is to Dr. Grevatt.
638	A little over a year ago, our committee unanimously
639	reported a bill to reauthorize and modernize the Safe
640	Drinking Water Act to help water systems comply with federal
641	mandates and keep their water safe. The centerpiece of that
642	bill was a 5-year, \$8 billion reauthorization of the Drinking
643	Water State Revolving Loan Fund. We are quite proud of that
644	bill and I want to explore how that bill can help with PFAS
645	contamination.
646	Can Drinking Water State Revolving Funds themselves be
647	used for infrastructure upgrades needed for things like
648	treatment, well upgrades, or distribution upgrades to help
649	address levels of PFAS?
650	Mr. Grevatt. Thank you, Chairman Shimkus. Yes. Yes,
651	certainly that fund can be used for those purposes.
652	Mr. Shimkus. Would this include filtration,
653	disinfection and disinfectant facilities, and project
654	planning and design activities?
655	Mr. Grevatt. Yes, sir. The fund can be used for those NEAL R. GROSS

656	purposes as well.
657	Mr. Shimkus. What about Drinking Water State Revolving
658	Fund set-asides? May these be used by a state to provide
659	technical assistance to support PFAS related work?
660	Mr. Grevatt. Certainly the set-asides can be used for
661	those purposes and are used quite broadly across the country
662	to support these efforts.
663	Mr. Shimkus. Would this apply to contamination and
664	treatment problems, outreach, and training on new issues for
665	water system workers' scoping studies for treatment purposes?
666	Mr. Grevatt. Yes, sir. All those things would be
667	covered by the Drinking Water SRF as eligible activities.
668	Mr. Shimkus. Thank you. We have several viewpoints on
669	what government should do to address PFAS contamination.
670	What specific actions under existing statutory authority can
671	federal government take to address PFAS?
672	Mr. Grevatt. Thank you, Chairman. So there are many
673	actions across the broad authorities that we have at EPA
674	currently that we are using right now to address PFAS and
675	those include actions under the Safe Drinking Water Act. For
676	example, the Unregulated Contaminant Monitoring Rule effort
677	that a number of the members have cited under SDWA focused on
678	PFAS. The last round we have the opportunity to develop

drinking water health advisories which we did for PFAS compounds and we also have the opportunity as a number of the members have noted to develop maximum contaminant levels.

That particular action is one that we are looking at very carefully as we speak. We have used steps under TSCA to address PFAS compounds including under TSCA Section 5. We have also used our authorities under CERCLA to address PFAS compounds at contaminated sites. So there are many opportunities that exist today to address these issues.

Mr. Shimkus. Which of these actions has EPA or others in the federal government not used and why?

Mr. Grevatt. So likely the two most significant that folks may be thinking about are the development of an MCL and also the listing of PFAS compounds as hazardous substances under CERCLA. And both those actions that EPA committed in its National Leadership Summit to explore very carefully and we are involved in that process right now as we speak.

They are both potentially very important in terms of the requirements that would be put on community water systems across the country on an MCL and also the hazardous substance listing would provide EPA with the opportunity to both order cleanup actions and recover costs that EPA may expend in cleanup actions. So they are both very important steps.

702	There are many different ways to achieve the hazardous
703	substance listing not only through CERCLA but through a
704	number of the other statutes that currently are in place that
705	EPA is responsible for fulfilling.
706	Mr. Shimkus. Thank you.
707	Ms. Sullivan, your testimony notes that DOD is taking
708	response actions in accordance with CERCLA or Superfund law.
709	Does DOD agree that cleanup of PFAS contamination is governed
710	under CERCLA?
711	Ms. Sullivan. Yes, sir. Following the longstanding
712	process that EPA has established under CERCLA it is
713	considered a tier 3 value. The reference dose behind the
714	lifetime health advisory can be used and is being used to
715	determine the risk associated with sites.
716	Mr. Shimkus. I will end my questions and yield back my
717	time and turn to the ranking member, Mr. Tonko, for 5
718	minutes.
719	Mr. Tonko. Thank you, Mr. Chair.
720	And, Dr. Grevatt, thank you for your testimony. You
721	described a number of actions EPA committed to doing earlier
722	this year. I would ask here, what steps must be taken before
723	EPA can make a determination about PFOA and PFOS as a
724	hazardous substance under Section 102 of CERCLA and what is
	NEAL R. GROSS

725	the timeline for that decision?
726	Mr. Grevatt. Right. Thank you very much, Ranking
727	Member Tonko. I appreciate the question and as I note it is
728	a very important issue. And so there are a number of ways
729	that EPA can achieve this hazardous substance listing through
730	CERCLA as you noted, but also through TSCA, through the Clean
731	Water Act, through the Clean Air Act, so there are a number
732	of different ways to achieve a hazardous substance listing.
733	And EPA is currently looking at the various authorities
734	including RCRA that allow us to list these as hazardous
735	substances thinking carefully about the different steps that
736	would be involved under each of those statutory authorities
737	and weighing which ones are going to make the most sense in
738	this case. Ultimately, the administrator will be making the
739	decision both as to whether he wants to proceed with the
740	hazardous substance listing and then under which statutory
741	authority to address that.
742	Mr. Tonko. And again what would the timeline for the
743	decision be?
7 4 4	Mr. Grevatt. So EPA is going to be developing a
745	National Management Plan for PFAS compounds. That was one of
746	the commitments at the National Leadership Summit and our
747	goal is to have that National Management Plan completed by

748	the end of his calendar year. So we are working diligently
749	on that right now, we expect that National Management Plan
750	will include this consideration of the hazardous substance
751	list.
752	Mr. Tonko. So that is in less than 4 months.
753	Mr. Grevatt. Yes, sir.
754	Mr. Tonko. If this determination is made, how will it
755	help states and localities address contamination issues and
756	hold responsible parties accountable for remediation?
757	Mr. Grevatt. Right, thank you. So the critical issue
758	that the hazardous substance listing will allow under CERCLA
759	is for EPA to order cleanup actions and if EPA has to expend
760	funds from the Superfund for the purpose of cleaning up sites
761	EPA will be able to recover costs that are expended. So this
762	will give very important tools for states and local
763	communities to address these PFAS challenges at contaminated
764	sites.
765	Mr. Tonko. Right. And what is the timeline for that
766	decision?
767	Mr. Grevatt. Right. So as I noted, we expect that this
768	issue will be addressed in the National Management Plan and
769	our goal is to have that completed by the end of this
770	calendar year.

Mr. Tonko. Okav. And if you listen to today's second panel, I am certain you will hear from states' public health advocates and concerned citizens that there is a widespread problem that needs a national framework and federal funding to support state, local, and individual responses. At this point there can be no doubt about the severity of the problem. You cannot hold a national summit and a public meeting tour without acknowledging this. So the gravity of the situation should be apparent by today's hearing, we are not holding hearings on other CCL or contaminants. So with all that in mind, will EPA commit to including PFOA and PFOS as part of Regulatory Determination 4? Mr. Grevatt. So a couple of important points on your question and thank you, Ranking Member Tonko, for that question. So the Regulatory Determination Number 4 is, the schedule for that is 2021 when that is due. EPA is currently looking at this issue of the Regulatory Determination for PFOA and PFOS as we speak. We expect that decision will be made long before 2021 and we will be addressing this issue as well in the context of the National Management Plan that will be completed by the end of this year.

So can we commit to that then or, obviously

Mr. Tonko.

771

772

773

774

775

776

777

778

779

780

781

782

783

784

785

786

787

788

789

790

791

792

793

794	there is a sense of urgency here.
795	Mr. Grevatt. Yes, absolutely. So we certainly can
796	commit to look carefully at this issue in terms of how the
797	agency will approach the Regulatory Determination. I don't
798	have an answer yet as to whether and how EPA will include
799	PFOA and PFOS in the Regulatory Determination. That is an
800	issue that as the Safe Drinking Water Act states is in the
801	sole judgment of the administrator, and Acting Administrator
802	Wheeler is looking at this issue right now as we speak.
803	Mr. Tonko. Okay. Well, we have seen some walking away
804	from commitments to the environment. So if you are going to
805	make this extensive effort to explore potential regulatory
806	actions, in the end EPA must be willing to say one way or
807	another if these contaminants need a national standard.
808	There can be no more kicking the can down the road, so I
809	would hope that we would get that sort of commitment.
810	Mr. Grevatt. Yes, sir.
811	Mr. Tonko. With that Mr. Chair, I yield back.
812	Mr. Shimkus. The gentleman yields back his time. The
813	chair now recognizes the vice chairman of this subcommittee,
814	Mr. McKinley, for 5 minutes.
815	Mr. McKinley. Thank you, Mr. Chairman. Certainly we
816	have had, in West Virginia we have had some exposure to the NEAL R. GROSS

PFOA and PFOS. We went through it a couple of years ago and we saw the concerns that people had, the population in one of the communities. Vienna, West Virginia wound up, with about 10,000 people it cost them \$6 million to address this problem and annually now it is going to be about a \$200,000 cost that they are going to have to incur.

We all want clean water. I am a hundred percent behind that on this, where we need to go on this. I am just, I am a little bit curious. Often we have an independent verification and validation process in software. Are we going to have anyone review the -- as we drop down from, remember, it went from 400 down to 70, now we may be talking about going down to 10. That is all wonderful. Is there going to be another validation of that to see that as we keep ratcheting down, will there be an independent verification, a second opinion so to speak that that is the right thing to do?

Mr. Grevatt. Without question, Congressman, if we were to make a change from the current drinking water health advisory of 70 parts per trillion for PFOA and PFOS combined, we would subject that, the scientific basis for that to independent peer review before we were to take such an action.

840	Mr. McKinley. Thank you. I think that is going to be
841	overall well, because I am concerned we had 63 sites around
842	the country 2 years ago. This was a very interesting report.
843	Did you help author that 2 years ago?
844	Mr. Grevatt. Yes, sir.
845	Mr. McKinley. About 103 pages long, as an engineer it
846	was enjoyable reading but it also told how the points we have
847	to raise on these matters. So now we had 63 communities that
848	are affected with this back then. If we were to go down to
849	10, 15 do you have any idea how many communities across the
850	country could be impacted with that?
851	Mr. Grevatt. Thank you, sir. It is difficult to
852	conjecture on the exact number. What I can say is in terms
853	of UCMR process that that process covered, it was a census of
854	all the large drinking water systems, larger than 10,000
855	people served, and a representative sample of systems smaller
856	than 10,000. As you noted, we found 63 of those systems had
857	levels above the drinking water health advisory of PFOA and
858	PFOS of 70 parts per trillion. That sample covered 80
859	percent of the United States population that is served by
860	community water systems and so we consider it a very
861	comprehensive effort.
862	Mr. McKinley. Well, what kind of numbers are we

863	talking? Could we have if we were to drop to 10, which again
864	in an ideal world that would be wonderful. As an engineer,
865	all of us want to have the purest water we can. But to get
866	down to 10, is that going to affect perhaps 300 communities,
867	3,000 communities to get down to 10?
868	Mr. Grevatt. I think it is very difficult to guess.
869	What we can say for certain is it will be more than 63 and we
870	know as a result of
871	Mr. McKinley. So as a result I know the timeframe on
872	this is that we, at least in West Virginia we had a company
873	that was on the hook to pay for this, but there are going to
874	be some communities that the companies are long gone and how
875	are they going to do this, so I don't know whether from the
876	military or the communities.
877	We have trouble right now with brownfield sites that we
878	have 480,000 brownfield or contaminated sites across America
879	but we only clean up about a thousand or less during a years'
880	time. I want to see this thing done, but I have got to find
881	out how to push the urgency that this is our number one
882	priority in addressing water on that.
883	Would you say that of all I want to, careful now on
884	this. Of all the water contaminants that we face bleach,
885	salts, nitrates is PFOA, is that the number one

886	contaminant?
887	Mr. Grevatt. I think it is very important to look at
888	this
889	Mr. McKinley. Is it the number one? Is that the one,
890	because we can chase a lot of rabbits here. I want to make
891	sure that we are chasing the right rabbit, the one that is
892	causing the greatest harm to the American public I want to
893	see us focus on that. Not one that just pops up over here
894	and, you know, that I won't give you an analogy. Is this
895	the number one health risk in water today in America, PFOA?
896	Mr. Grevatt. Thank you, Congressman. In communities
897	where PFAS compounds have impacted drinking water supplies
898	they are presenting significant challenges. Nationally, I
899	would say no, this is not the number one challenge that we
900	face. I think there are important issues around the basics
901	of water treatment, especially around areas, things like
902	disinfection and disinfectant byproducts in systems. It is
903	very important to make sure that we also focus holistically
904	on the full spectrum of challenges that face our nation's
905	drinking water systems.
906	Mr. McKinley. Thank you and I yield back.
907	Mr. Shimkus. The gentleman yields back his time. The
908	chair now recognizes the ranking member of the full NEAL R. GROSS

909 committee, Congressman Pallone, for 5 minutes. 910 Mr. Pallone. Thank you, Mr. Chairman. 911 My home state of New Jersey has been studying PFAS 912 contamination in drinking water since 2006, following reports 913 of contamination from a DuPont facility, and monitoring by 914 the state and by EPA has shown widespread contamination across New Jersey. In 2017, New Jersey set an MCL for PFOA 915 916 at 14 parts per trillion and another MCL for PFNA at 13 parts 917 per trillion. 918 And those standards were a triumph for science and 919 advocates in New Jersey who worked for years to overcome 920 political opposition and this standard has been important to 921 communities across the state and ensures that drinking water 922 is being treated to remove those chemicals. But I have heard 923 serious concerns that the Department of Defense is not 924 cleaning up contaminated sites in New Jersey to that state 925 standard. 926 So, Ms. Sullivan, the Department of Defense has 927 conducted testing at and around some military facilities in 928 New Jersey. According to the presentation you made to Congress in March, drinking water contamination has been 929 930 found around Naval Weapons Station Earle, which is in my 931 district, and Joint Base McGuire-Dix-Lakehurst.

932 Groundwater contamination has also been found around the former Naval Air Warfare Center in Trenton with levels as 933 934 high as 22,800 parts per trillion detected. According to 935 your March report, the contamination at former Naval Air 936 Warfare Center in Trenton will be handled through a continued 937 Superfund process. 938 So my questions are, will that cleanup in Trenton meet 939 the New Jersey standards of 14 and 13 parts per trillion and 940 will you commit to me that DOD will meet those standards for 941 cleanups in my state? 942 Ms. Sullivan. Thank you, Congressman, for the question. 943 I appreciate that you have read our detailed report from 944 earlier this year. The Department of Defense as we are 945 required to by CERCLA in the Defense Environmental 946 Restoration Program statute is following the CERCLA process. 947 And as part of that process the state levels are rolled in 948 through the risk assessment process. 949 So as we go through our analysis following the structure 950 of it, these state standards will in fact be rolled in as a 951 consideration as an appropriate and relevant regulation. Αt 952 the end of that risk assessment process there will be a 953 determination of unacceptable risk that will be reviewed not 954 only by us, but by the state, your state environmental agency

955 and the Environmental Protection Agency to determine what the 956 end remedy solution will be. 957 Mr. Pallone. But my concern as you can imagine, is that 958 because I am very familiar with the Superfund process is 959 oftentimes DOD or even EPA do not necessarily recommend a 960 more strict standard. You know, they look at it as a factor and you are saying they will, which I appreciate, but they 961 962 may not adopt the standard. 963 I just think -- I mean they may not insist on that as 964 the remediation alternative that they pick. And the fact 965 that DOD is not bound by these state drinking water 966 standards, you know, to me, shows how important a national 967 drinking water standard is because it may very well be that 968 those state standards are not met. I mean obviously I would 969 urge you to meet them, but you are not going to guarantee 970 that they would be because you are just saying it will be 971 considered. 972 Ms. Sullivan. Yes, sir. They will be considered as part of the CERCLA process which we are bound to. 973 974 Mr. Pallone. Yes. Well, I think, I mean I think that 975 is unfortunate. I think you should be bound by them, and 976 even if you are not that you should, you know, you should adopt them. But I appreciate your candor. 977

978	Now, Ms. Sullivan, what chemicals is the Department of
979	Defense using in place of PFOA and other PFAS? Has the
980	Department conducted studies of those chemicals to establish
981	their safety?
982	Ms. Sullivan. Thank you again, sir, for that question.
983	We are in the process of investing a significant amount of
984	research and development to first demonstrate the
985	commercially available substances to see that are PFOA-
986	free to see if they meet our strict standards in order to
987	fight fires. We are also investing research and development
988	dollars to sponsor development of a fluorine-free foam that
989	also meets.
990	And as I stated, while we continue to do that we are
991	working with the current manufacturers to fully understand
992	how much PFOA is in the products that they are providing to
993	us and controlling the releases of those.
994	Mr. Pallone. All right. I am just going to run out of
995	time. I just was going to ask you if you could provide the
996	committee, through the chairman, with any and all studies
997	that the Department of Defense has regarding the safety of
998	these substitute chemicals if you would.
999	Ms. Sullivan. Certainly we can.
1000	Mr. Pallone. And, Mr. Chairman, I know my time is NEAL R. GROSS

1001	running out, but I know you were so much involved with TSCA
1002	and I just wanted to say that the concern over substitutes is
1003	not limited to PFAS and was central to our efforts to reform
1004	TSCA as you know. And unfortunately EPA's implementation of
1005	TSCA has fallen short of our hopes and so I was hoping that
1006	we have an opportunity for a hearing on TSCA implementation.
1007	I will make that request again, Mr. Chairman.
1008	Mr. Shimkus. I would thank the chairman. I think that
1009	is going to be doable. We will try to figure out a time. I
1010	think both sides are kind of frustrated with the process and
1011	my frustration is a surprise in some of the areas and I think
1012	it has been flipped on both issues. So I think we will do
1013	our best to try to find some time to do that. As one of our
1014	signature legislative accomplishments, we would hate to see
1015	it bogged down in implementation.
1016	Mr. Pallone. Thank you.
1017	Mr. Shimkus. Having that the gentleman returns his
1018	time, the chair now recognizes the gentleman from Ohio if he
1019	is ready, Mr. Johnson, for 5 minutes.
1020	Mr. Johnson. Thank you, Mr. Chairman. I appreciate you
1021	holding this very important hearing. You know, many people
1022	throughout the country are very familiar with the issues we
1023	are discussing today. And along the Ohio River, along with NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS

1024 other states along the river we are no exception to that. 1025 is vital that we continue to develop a complete understanding 1026 of how chemicals in high concentrations like PFOA impact 1027 populations and how best to take any actions necessary. 1028 I know many studies including some prominent ones within 1029 Ohio such as the University of Cincinnati have been conducted 1030 on this issue and I hope to see those studies continue. 1031 also know that the EPA is working on these issues as Dr. 1032 Grevatt has indicated in his testimony. 1033 So, Dr. Grevatt, you have worked with Ohio on many 1034 occasions on water contamination issues and we appreciate 1035 How can Ohio continue to best engage with the EPA on 1036 these issues? 1037 Mr. Grevatt. Thank you, Congressman, and appreciate 1038 your noting my work with Director Butler and others from Ohio EPA, my home state, so I have a great connection with folks 1039 1040 there. 1041 We are working very closely with all the states on the 1042 activities that we have underway. We will continue to stay 1043 very close to the state of Ohio and other states on issues 1044 like the development of toxicity factors for PFBS and GenX on 1045 these questions about development of the decision on a 1046 hazardous substance listing and potentially on an MCL, so as

1047	well as the groundwater cleanup goals. These are all issues
1048	that we are working very closely with the state of Ohio and
1049	others states on. We will commit to continuing that
1050	connection with the states.
1051	Mr. Johnson. Okay. And are you working with them on
1052	any of the DOD facilities as well?
1053	Mr. Grevatt. Yes, sir.
1054	Mr. Johnson. Okay.
1055	Mr. Grevatt. So yes, as Ohio and other states request
1056	support from EPA we are for certain going to be there to
1057	assist them with these challenges.
1058	Mr. Johnson. Okay. I understand the local government
1059	advisory committee is soliciting input. How can people along
1060	the river along my district best engage in this process and
1061	what can Congress do to help?
1062	Mr. Grevatt. Thank you very much. So one of the things
1063	that citizens across the U.S. can do right now is we have
1064	opened the docket in addition to the community engagement
1065	sessions which I referred to that we have had now in five
1066	different states. We opened the docket so anyone in the U.S.
1067	who wants to submit their perspectives to us can do so right
1068	now. That way we have about 80,000 comments that we have
1069	received thus far.

1070	We will hold that docket open until right about the end
1071	of this month. And then if there are specific issues that
1072	you have that you would like to follow up on, we would be
1073	happy to circle back with you and your staff to discuss
1074	those.
1075	Mr. Johnson. Okay, thank you.
1076	Ms. Sullivan, same question for you. We have a
1077	significant Defense Department footprint in Ohio Wright-
1078	Patterson, Mansfield, Youngstown Air Reserve Base, et cetera.
1079	Is there anything that we can do to more closely engage with
1080	the DOD on some of these issues?
1081	Ms. Sullivan. Thank you, Congressman. I know that
1082	Wright-Patterson has, well, Wright-Patterson has a
1083	restoration advisory board which is community based so to try
1084	and engage the local community and be transparent in what is
1085	going on, on the base, and I encourage the local communities
1086	to engage in that. The Air Force has been very transparent
1087	in their process having established websites and public
1088	meetings and I encourage the community to get engaged in
1089	those processes.
1090	Mr. Johnson. And, Ms. Sullivan, your written testimony
1091	discusses the remediation of PFOS and PFOA and you note that
1092	DOD is addressing known or suspected releases of these

1093	chemicals to determine whether there is exposure through
1094	drinking water. Is DOD only looking at drinking water
1095	exposure and what about releases to soil sediment and
1096	groundwater?
1097	Ms. Sullivan. Thank you, I appreciate the opportunity
1098	to answer that question. The exposure through drinking water
1099	was our first priority so we wanted to make sure that we
1100	fully understand if anybody, humans were being exposed and to
1101	cut that off. Then we are going through the standard process
1102	to look at all of the potential exposure pathways including
1103	soil and groundwater. But we are taking a more deliberative
1104	approach because our first priority was to cut off human
1105	exposure.
1106	Mr. Johnson. Okay. Just real quickly back to you, Dr.
1107	Grevatt. You mentioned EPA is working on response actions
1108	with other agencies such as HHS. Can you explain your work
1109	partnership with HHS including what agencies at HHS and what
1110	collaboration has occurred and what we can expect moving
1111	forward?
1112	Mr. Grevatt. For certain. Thank you, Congressman. So
1113	as I noted we are working very closely with HHS on a number
1114	of the actions which we identified. Those include the
1115	development of the toxicity values of PFBS and GenX. We are NEAL R. GROSS

1116	working, really, with all the different parts of HHS
1117	including the assistant secretary's office, Assistant
1118	Secretary for Health, right down through FDA, NIEHS, ATSDR,
1119	CDC, every part of HHS has been involved to participate in
1120	this effort. And we will continue to work side by side with
1121	them on these issues.
1122	Mr. Johnson. Okay. Well, thank you both for your
1123	testimony.
1124	Mr. Shimkus. The gentleman's time has expired. The
1125	chair now recognizes the gentleman from Texas, Mr. Green, for
1126	5 minutes.
1127	Mr. Green. Thank you, Mr. Chairman, you and the ranking
1128	member, for holding this hearing. Per or polyfluoroalkyl
1129	substances, or PFAS, has been around for many years and has
1130	found a wide variety of uses in consumer products from our
1131	cookware to stain repellents to fire retardants. Due to the
1132	widespread use, most people have some exposure to PFAS.
1133	While scientific data shows minimal amounts of exposure do
1134	not pose substantial risk, higher levels of exposure could
1135	lead to a wide array of adverse health effects. I would like
1136	to thank our witnesses for being here today to testify and
1137	look forward to your opinion.
1138	Dr. Grevatt, in 2016, EPA revised its nonbinding

1139	lifetime health advisory level for PFAS down from 400 parts
1140	per trillion to 70 parts per trillion. What was the impact
1141	of this decision?
1142	Mr. Grevatt. Thank you, Congressman, a very important
1143	step in terms of having a final lifetime health advisory. We
1144	provided this to the states and members of the public in
1145	terms of not only the value of the health advisory but steps
1146	that communities could take to address concerns with PFAS.
1147	And this health advisory came out as we were completing the
1148	UCMR process, the national monitoring study that I mentioned,
1149	and so together they were able to help to identify
1150	communities that may have concerns related to PFAS in their
1151	drinking water supply. So it was a very important step.
1152	Mr. Green. What does it take to go from a nonbinding to
1153	binding?
1154	Mr. Grevatt. That would be, and as you noted, sir, the
1155	drinking water health advisories are really guidance values.
1156	They are not requirements. It would take us a national
1157	drinking water regulation, an MCL for PFAS compounds to
1158	create a binding requirement in terms of meeting those
1159	levels.
1160	Mr. Green. Well, I have a very urban district in
1161	Houston, a chemical industry, refinery industry, but in Texas NEAL R. GROSS

1162	like Ohio we have a number of military bases. In fact, Fort
1163	Hood is probably the biggest base in the world. We have air
1164	bases. Has there been a partnership with the bases in Texas
1165	as you said that in Ohio?
1166	Mr. Grevatt. Yes, sir. We are working closely with DOD
1167	on these issues all across the country. And perhaps Ms.
1168	Sullivan would like to respond.
1169	Ms. Sullivan. Thank you, sir. The bases in Texas are
1170	subject to the same processes across that we have established
1171	across the nation. They had to go and look where they had
1172	known and suspected releases and if there were any they had
1173	to determine if there was exposure through drinking water and
1174	address that. I can provide you detailed information if you
1175	would like on the bases in Texas.
1176	Mr. Green. I would appreciate that so I can share it
1177	with my other colleagues in Texas. Does EPA currently have
1178	the technical expertise to set MCL that protects public
1179	health?
1180	Mr. Grevatt. Yes, sir. I believe we do.
1181	Mr. Green. How do you reconcile that the Agency for
1182	Toxic Substances and Disease Registry released a draft study
1183	of the public health risk of PFAS that showed maximum safe
1184	levels of chemicals are seven to ten times less than the

1185	health advisory set by EPA? Is EPA ignoring this mission or
1186	how do you reconcile that between the Disease Registry?
1187	Mr. Grevatt. Thank you, Congressman. So I would say a
1188	couple of things about that. The first is that the purpose
1189	of the document that ATSDR developed is different from our
1190	drinking water health advisory. They used these toxicity
1191	profiles as screening values for sites and then also they
1192	chose to view the science somewhat differently than we did.
1193	We are working very closely with them on these issues to make
1194	sure that we are sharing the best information we have as we
1195	go forward.
1196	Mr. Green. Well, obviously there is some concern
1197	because, you know, we know what happened in Flint, which was
1198	not that issue, but what former Chairman Upton talked about
1199	in his area and again in an industrial area we could have the
1200	same thing.
1201	Given the action that is seen at the state level to set
1202	maximum containment levels, or MCL, what is EPA's expected
1203	timeline for setting federal MCL for PFAS under the Safe
1204	Drinking Water Act?
1205	Mr. Grevatt. Thank you, Congressman. So this is one of
1206	the key actions that we identified earlier this year that we
1207	were going to be exploring throughout the year. We expect NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS

1208	this to be included in the National Management Plan and we
1209	hope to have that completed by the end of this calendar year.
1210	Mr. Green. Okay. Well, I would hope EPA would quickly
1211	move and address the issue in a competent manner relying on
1212	the solid peer reviews data and allowing public input
1213	throughout the process. And like I said, I don't think any
1214	member on the dais would not be willing to partner in our
1215	communities if that was the issue.
1216	I will yield back my time, Mr. Chairman.
1217	Mr. Shimkus. The gentleman yields back the time. The
1218	chair now recognizes the gentleman from Texas, Mr. Flores,
1219	who with my apologies for skipping you, you are recognized
1220	for 5 minutes.
1221	Mr. Flores. That is okay. You just let the other
1222	gentleman from Texas ask my question. But I would like to
1223	thank you, Mr. Chairman.
1224	Dr. Grevatt, a couple of questions for you really
1225	quickly. Continuing Mr. Green's line of questioning, did the
1226	EPA learn anything from the ATSDR report that was
1227	dramatically different from what it had developed internally
1228	with respect to maximum levels?
1229	Mr. Grevatt. Thank you, Congressman. So as I noted, we
1230	have worked closely with ATSDR on the communication of their NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS

1231	report and in the development of their report. We provided
1232	comments to them and have worked throughout this process. I
1233	think one of the things that we have learned and perhaps
1234	these reports reinforce is the importance of focusing on risk
1235	communication with the public so we don't lead people to a
1236	place where they are confused about what do these different
1237	values mean.
1238	And as I noted, they have different purposes, the
1239	toxicity profile from our health advisory, but that has been
1240	a really important message. Also throughout the national
1241	engagement that we have done risk communication is something
1242	we need to continue to focus and try and advance.
1243	Mr. Flores. Let's go ahead and move to the
1244	communications question. Mr. Upton brought this up during
1245	his opening testimony. Would you say that the current
1246	communication efforts with respect to PFAS are effective?
1247	Mr. Grevatt. I think, sir, that we always can improve
1248	and we need to focus on continuing to improve on our risk
1249	communication and this is a top priority for Acting
1250	Administrator Wheeler.
1251	Mr. Flores. So what improvements would be needed? I
1252	mean what are your initial thoughts as far as improvements
1253	that could be put in place?

1254	Mr. Grevatt. I think it is important for us to continue
1255	to work towards characterizing the context for these values,
1256	what they mean, what does 70 parts per trillion mean and what
1257	are the implications for a community that may have a level
1258	above 70 parts per trillion. I think it is natural that
1259	folks will become very concerned when they see levels
1260	approaching that. And we think it is important to focus on
1261	PFAS. We think it is important to focus at the local level
1262	on awareness of these compounds and taking steps to address
1263	them. But we want to try to continue to share this
1264	information in a way that doesn't create a great deal of
1265	anxiety and fear on the part of the public. I think that is
1266	a place where we can make further progress.
1267	Mr. Flores. Let's drill into the 70 parts per trillion
1268	metric for a minute. Does today's technology readily measure
1269	concentrations of this contaminant at that level?
1270	Mr. Grevatt. Yes, sir.
1271	Mr. Flores. It does, okay. Thank you. I yield back
1272	the balance of my time.
1273	Mr. Hudson. [Presiding.] The gentleman yields back.
1274	The chair recognizes the gentleman from California, Mr.
1275	McNerney.
1276	Mr. McNerney. Well, I thank the chair. While I

1277	appreciate that the EPA is hearing from the public and
1278	engaging with communities impacted by PFAS, recent actions by
1279	the EPA have undermined public confidence and my confidence
1280	in the Agency's ability to address human health risks posed
1281	by these toxic chemicals.
1282	In April of this year, the EPA proposed a rulemaking
1283	titled, Strengthening Transparency in Regulatory Science.
1284	Now, this was modeled after the secret science legislation
1285	drafted by the House Republicans. The proposal could require
1286	the EPA to ignore important scientific studies of human
1287	health effects because the data included private medical
1288	information.
1289	Dr. Grevatt, was the Office of Water consulted before
1290	the rulemaking was proposed?
1291	Mr. Grevatt. Thank you, Congressman. This rulemaking
1292	is an Agency rulemaking and so all parts of the Agency are
1293	engaged on this. It is being led from the Office of Research
1294	and Development but we are connected in this effort.
1295	Mr. McNerney. Okay. Did your office assess how the
1296	proposal would impact your ability to address PFAS
1297	contaminations?
1298	Mr. Grevatt. Sir, while the proposal has received many,
1299	many comments as I think you are aware and the Agency is in NEAL R. GROSS

1300	the process of considering the comments as they move towards
1301	development of a final rule, and I think it is difficult to
1302	conjecture at this stage what those impacts might be.
1303	Mr. McNerney. Well, in June of this year I joined
1304	Ranking Member Pallone and Ranking Member Tonko in sending a
1305	letter to the Agency requesting additional information on the
1306	issue, 2 months later the Agency responded to me personally.
1307	I would like to submit my letter and the Agency's response to
1308	the committee for the record.
1309	Mr. Hudson. Without objection, so ordered.
1310	[The information follows:]
1311	
1312	*********COMMITTEE INSERT 3******

1313	Mr. McNerney. Thank you. Mr. Grevatt, are you aware of
1314	this letter?
1315	Mr. Grevatt. I am aware that we have received the
1316	letter. I personally have not been engaged specifically on
1317	this issue in the response to that letter.
1318	Mr. McNerney. Okay. Well, the letter requests that the
1319	EPA provide us with copies of all comments or feedback from
1320	the EPA staff on the Agency's proposed Strengthening
1321	Transparency in Regulatory Science rulemaking, including but
1322	not limited to members from the rulemaking's Action
1323	Development Working Group. There were other requests as well
1324	as this.
1325	This information is important so that we can better
1326	understanding what, if any, concerns were raised on how the
1327	proposed regulation would impact its ability to address human
1328	health risks associated with PFAS. Again it took the Agency
1329	2 months to respond, but they haven't, the Agency hasn't
1330	produced the documents that were requested in the letter.
1331	Would you commit to providing those documents for the
1332	record?
1333	Mr. Grevatt. Sir, I will certainly commit to working
1334	with our congressional staff to follow up with you and your
1335	office to make sure that we are having the conversations that ${\bf NEAL\ R.\ GROSS}$

1336	you are wanting to have on this.
1337	Mr. McNerney. Okay. I did mention earlier that the
1338	public has lost confidence. What do you think that you
1339	personally can do to help restore that confidence?
1340	Mr. Grevatt. Sir, I think I appreciate your question
1341	and I would turn back on this PFAS issue to the national
1342	engagement that we are involved in. And through this process
1343	I personally have had the opportunity to meet with hundreds
1344	of impacted citizens across multiple states. I have heard
1345	statements from over 120 individuals talking about their
1346	challenges and we are taking this back and folding this into
1347	the National Management Plan.
1348	I think it is very important for the public to be able
1349	to see how their comments to us are reflected and the steps
1350	we are taking and that is really what we are committed to
1351	here through this national engagement. I think it has been a
1352	very important step, a very valuable step for us as we are
1353	addressing this issue.
1354	Mr. McNerney. Do you agree with the provision that
1355	would exclude information because it is from private medical
1356	information?
1357	Mr. Grevatt. So this issue is under careful
1358	consideration by the Agency and we are thinking through the NEAL R. GROSS

1359	public comments that we have received on the transparency
1360	rule and that process continues.
1361	Mr. McNerney. All right. Thank you, Mr. Chairman. I
1362	yield back.
1363	Mr. Hudson. The gentleman yields back. At this time
1364	the chair will recognize himself for 5 minutes for
1365	questioning.
1366	Dr. Grevatt, Administrator Pruitt has been here a number
1367	of times and I have questioned him each time about this PFAS
1368	issue, about GenX in particular and the need to develop a
1369	comprehensive plan for containment and removal. The Agency
1370	responded in April to a letter I followed up with on that,
1371	those two testimonies, saying that a key priority for the EPA
1372	is to further the understanding of human health impacts of
1373	PFAS to support states and local communities.
1374	The EPA is currently developing a human health toxicity
1375	information for GenX that will provide a scientific basis for
1376	states and communities to set that will refine public health
1377	goals. So I want to ask you a few questions about that and
1378	we only have 5 minutes so I would just ask you to be as
1379	concise as you can. Could you provide a timeline for when
1380	the toxicity value for GenX will be released?
1381	Mr. Grevatt. Yes, sir. We are very close to this now.

1382	We expect in the coming weeks to have that available, in
1383	draft, for public review and comment.
1384	Mr. Hudson. Okay, thank you for that. Once this
1385	toxicity value of GenX is released, can you commit to
1386	releasing a public health advisory specifically for GenX?
1387	Mr. Grevatt. So thank you, Congressman. We will work
1388	closely with the states to determine what will be most
1389	helpful to them. And, for example, on GenX specifically with
1390	regard to North Carolina, we are working side by side with
1391	them and want to make sure that we are providing them the
1392	support they need.
1393	And, sir, I might just add that we appreciate your
1394	invitation to come to Fayetteville. We appreciate your
1395	participation in that event and that in particular along with
1396	the others we found to be tremendously valuable. So thank
1397	you very much for your leadership on that.
1398	Mr. Hudson. Thank you. I would just stress that I
1399	think the public health advisory is really the next step in
1400	the process once we get those toxicity numbers to really help
1401	the state understand what we need to do going forward. So I
1402	appreciate you working so closely with the state.
1403	Based on my past discussions with EPA officials, I
1404	understand EPA is working very closely with the state and I NEAL R. GROSS

1405	get that feedback from the state. Are you aware of any
1406	outstanding questions or information that EPA still owes the
1407	state of North Carolina?
1408	Mr. Grevatt. I think there are ongoing conversations
1409	with the state of North Carolina addressing all kinds of
1410	issues including stack testing at the Chemours facility,
1411	sampling the Cape Fear watershed and so I think those
1412	discussions are ongoing. So I am reluctant to say there is
1413	nothing outstanding because there is a lot that is going on
1414	and we will remain committed to supporting the state
1415	throughout this process.
1416	Mr. Hudson. I appreciate that. Now my understanding is
1417	there are over 20 other chemicals besides GenX who were found
1418	in the Cape Fear Basin. Is that part of this ongoing
1419	discussion is looking at those chemicals as well?
1420	Mr. Grevatt. Yes, sir.
1421	Mr. Hudson. Can we expect to have those results this
1422	month as well in the draft form or is that going to be later?
1423	Mr. Grevatt. So those results if you could, I want to
1424	make sure I understand specifically your question. So we are
1425	going to have the GenX toxicity assessment in the coming
1426	weeks available and then we will have the National Management
1427	Plan. Our goal is to have that completed by the end of the NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS

calendar year. That will be a comprehensive view across EPA's actions in conjunction with the state to address these issues.

Mr. Hudson. Great. Again I appreciate you accepting our invitation to come to Fayetteville for the community engagement, but I understand you are doing those around the country in other communities. Can you provide us just a few brief takeaways from our community engagement summit?

Mr. Grevatt. Yes, sir. Thank you. So as I mentioned, in the case of Fayetteville I heard from over 50 citizens about the concerns they face and the concerns are very significant and they range from concerns about protecting families, their children, to economic impacts of the decisions.

We heard from folks in Wilmington as well who came up and talked about the economic impact on the very important work that the drinking water utility is doing to put in drinking water treatment and concerns about they are going to pay for these actions. And so extensive concerns addressed and we will remain committed to working closely with the community in Fayetteville, the state of North Carolina, community of Wilmington, on addressing those issues going forward.

1451	Mr. Hudson. We appreciate that very much. Is there any
1452	information you learned that you think helped move you
1453	forward in terms of examining the chemical?
1454	Mr. Grevatt. I think again reiterating the point on
1455	risk communication in the case of North Carolina because they
1456	themselves have been working towards a health value on GenX.
1457	We heard from them very clearly how important it is to be
1458	closely coordinated and we are working side by side with them
1459	in every step of this process.
1460	Mr. Hudson. I appreciate that. One other issue I am
1461	trying to wrap my brain around maybe you can help me with is,
1462	in your opinion, what is the lowest allowable and
1463	scientifically reliable level at which PFAS can be detected
1464	and monitored?
1465	Mr. Grevatt. Right. So in terms of the reliable level
1466	where it can be detected, I think we are down into the single
1467	digits of parts per trillion that can be monitored. And in
1468	part that is a result of the national study that we did to
1469	build lab capacity across the country, so this continues to
1470	advance. But I think we are in the single digits of parts
1471	per trillion for these compounds.
1472	Mr. Hudson. Great, thank you for that and my time is
1473	expired. At this time I will recognize the gentlelady from NEAL R. GROSS

1474 Michigan, Mrs. Dingell, for 5 minutes. 1475 Mrs. Dingell. Thank you, Mr. Chairman. I think you can 1476 tell that Republicans and Democrats are pretty unified here 1477 on the concern about the PFAS chemicals. 1478 And I want to build, the Flint water crisis is something 1479 that every member on this dais has in their head and every 1480 American across the country is worried about. And PFAS in 1481 Michigan is scaring people more than the Flint water did, but 1482 I also think that it is across the country as you have heard 1483 from my colleagues here. 1484 I have several points I want to make, but I will build 1485 right on the last questions first. And I am very glad that 1486 you went to Fayetteville. North Carolina wanted to see you, 1487 but so did Michigan and Michigan had originally been 1488 scheduled to be one of those community forums. People wanted 1489 you from one side of the state to the other and you didn't 1490 Why did you cancel Michigan and could we get you to 1491 still come? 1492 Mr. Grevatt. Right. So we have been working very 1493 closely with Michigan and all the states in determining the 1494 locations for these events, and if in fact Michigan now wants 1495 us to do an event in the state we will be glad to talk with 1496 you and talk with them about how we might do some kind of an

1497	event.
1498	Mrs. Dingell. This is a formal invitation on behalf of
1499	a whole lot of people. I know Fred joins me on the other
1500	side, don't you, Fred?
1501	Mr. Upton. Unanimous, yes.
1502	Mrs. Dingell. So you have an Upton Walberg Dingell
1503	invitation for a community forum in Michigan and we take that
1504	you have accepted it. And I think our czarina would support
1505	it too.
1506	Mr. Grevatt. So we will be very glad to follow up with
1507	all of you and your staffs about this as well as with the
1508	state. And as I mentioned, we have been working closely with
1509	Michigan and if they in fact now have decided they want us to
1510	come then we will be glad to come.
1511	Mrs. Dingell. I know a lot of people have. I was asked
1512	by many people to raise that.
1513	I want to go back again, and I know we all keep asking
1514	the same question. But I think what has really got everybody
1515	worried is we don't we need to change the national
1516	standard for what is a safe level and you are telling us that
1517	you are going to, I think you are telling us. You are not
1518	saying you are going to determine whether we need it. I
1519	think, I hope that you are saying that we do need to revise NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS

1520 the standard. You are going to put out a National 1521 Management Plan by the end of the year. What is going to be 1522 in that plan? Are you going to give us what the new standard 1523 should be and how long is that going to take? 1524 create that sense of urgency that cuts through bureaucracy 1525 and keeps Americans safe drinking their water? 1526 Mr. Grevatt. Thank you very much for those questions. 1527 So a couple of things I want to respond with, first, to be 1528 clear, we have a guidance value now not a regulatory standard 1529 and one of the key items we are committed to at EPA by the 1530 end of the year in the Management Plan is to consider whether 1531 we should be developing an MCL for PFOA and PFOS or other 1532 compounds. So we are still engaged in that process. 1533 If we were to, in the context of a drinking water health 1534 advisory, think about lowering that level, we would subject 1535 that to scientific peer review before we took that kind of a 1536 So we are working through these issues now. 1537 these to be addressed in the National Management Plan and our 1538 goal is to have that done by the end of the calendar year. 1539 Mrs. Dingell. So I am going to push on that a little. 1540 So are you telling us you are still -- I mean, I think that 1541 all of us on this dais have seen enough in scientific studies I think the children in Flint 1542 that we have got a problem.

1543	that got poisoned wish somebody had cared enough. So are we
1544	talking about another 2, 3, 4 or 5-year bureaucracy or are we
1545	looking at something that is really going to get at this
1546	quickly to keep the American people drinking safe water?
1547	Mr. Grevatt. I thank you. And making sure Americans'
1548	drinking water is safe is a top priority for EPA and we will
1549	continue to focus on this issue.
1550	You asked about the National Management Plan. This will
1551	be a comprehensive view not only in the drinking water area,
1552	but across all of our statutory authorities about steps that
1553	we can take now to make sure that we are protecting Americans
1554	in their communities. And so that will be the focus of the
1555	National Management Plan and the goal is as I noted to have
1556	that done by the end of the calendar year.
1557	Mrs. Dingell. I have more questions for you but I don't
1558	want Ms. Sullivan to feel lonely. So we have got five sites
1559	in Michigan that are sites that have been contaminated
1560	because of military presence. What is DOD doing to help us
1561	clean up in Michigan?
1562	Ms. Sullivan. Well, thank you, ma'am, for asking. At
1563	all of those sites we have gone out and identified where we
1564	have known and suspected releases. We have tested many
1565	drinking water sources. Every drinking water source that has NEAL R. GROSS

1566	tested above the EPA's advisory level
1567	Mrs. Dingell. Five of them.
1568	Ms. Sullivan we have worked with the communities
1569	to provide those citizens, because some of them are private
1570	wells as you can appreciate, alternative drinking water
1571	sources. It is up to them which of these options are
1572	available. Then we are embarking on the entire CERCLA
1573	process to really fully analyze the situation. What are the
1574	sources, what are the pathways, and working with the state
1575	and EPA on what the remedy solution would be in strong
1576	partnership.
1577	Mrs. Dingell. Obviously there are a lot more questions
1578	but I am out of time.
1579	Mr. Shimkus. The gentlelady's time is expired.
1580	Just for our information we have Navy bases, Air Force
1581	bases, Coast Guard bases, and Army posts. So just in
1582	definitional terms as an Army guy we have posts. The chair
1583	recognizes the gentleman from Michigan, Mr. Walberg, for 5
1584	minutes.
1585	Mr. Walberg. Thank you, Mr. Chairman, and thank you to
1586	the panel for being here. It was good to have Acting
1587	Secretary Administrator Wheeler in Michigan in my district
1588	on the banks of Lake Erie and other places and it was good to NEAL R. GROSS

be able to talk to him about this PFAS/PFOS issue and to understand very clearly that it is being taken seriously and that there is, and I want to follow up on my friend and colleague from Michigan as well. It is good to know that you are willing to come, but it is also good to know that you remain in contact with our state as well on this issue on a regular basis.

Mr. Grevatt, you mentioned you are working with states like Michigan and North Carolina. What do you think are the things of greatest value that you could offer them at this time?

Mr. Grevatt. Thank you very much, Congressman. So a number of the things that the states have communicated to us that they really need help on include assistance with risk communication in talking to the impacted public in their states about these issues, support with analytical methods, development of additional tools to sample for these compounds in the environment, the toxicity values are also important, and then consideration of treatment techniques that are available. And, in fact, all of those things are things that we are currently working on with the states to support them in addressing these challenges.

And so we are staying very close to the states and

1612	focused on what tools we can provide to help them to address
1613	these challenges and how do we best address these challenges
1614	and how do we best support local communities.
1615	Mr. Walberg. With these challenges if the states
1616	struggle in some of these areas like Michigan, North
1617	Carolina, other states, if they struggle where do they
1618	struggle the most?
1619	Mr. Grevatt. I think there have been challenges
1620	certainly around technical questions, around sampling and
1621	analysis of compounds. Those are issues that we have talked
1622	about extensively with Ms. Grether in the state of Michigan.
1623	With questions around characterizing levels of these
1624	compounds in the environment and how to do so, those are
1625	issues that we worked on very closely with the state of North
1626	Carolina.
1627	And toxicity as well, you know, there are questions
1628	around the broad set of compounds, PFAS compounds, where we
1629	talk a lot about PFOA and PFOS, but there are many other
1630	compounds that we need to stay focused on. And I think those
1631	are issues that have been concern to states as well.
1632	Mr. Walberg. Okay. Section 1453 and 1454 of the Safe
1633	Drinking Water Act create a framework for states to do source
1634	water planning and voluntary response efforts. H.R. 3387, NFALR. GROSS

1635	the Drinking Water System Improvement Act, the bill our
1636	committee, thankfully, unanimously supported, would allow new
1637	and updated states' source water plans to qualify for
1638	assistance. Would these source water plans permit states to
1639	address PFAS contamination?
1640	Mr. Grevatt. Yes, sir. I think they would help to
1641	address PFAS contamination. And it has been very important
1642	the work that Ms. Sullivan has talked about at DOD. We see
1643	that many of the instances of drinking water contamination
1644	are related to known sources. Those might be DOD facilities,
1645	but there are certainly many others as Ms. Sullivan
1646	indicated. And I think the source water protection focus can
1647	really help local communities to understand their
1648	vulnerabilities for PFAS and other compounds.
1649	Mr. Walberg. Okay. Would these plans and responses
1650	also be eligible from the resources of a state SRF under
1651	Section 1452(k)?
1652	Mr. Grevatt. And certainly in particular through the
1653	set-asides and the technical assistance these are activities
1654	that can be covered in that area, yes.
1655	Mr. Walberg. In your response to the chairman you
1656	mentioned that DWSRF funding could be used for PFAS. Could
1657	it be used for other emerging contaminants as well?

1658	Mr. Grevatt. Yes, sir.
1659	Mr. Walberg. Do you know how many states are already
1660	doing this?
1661	Mr. Grevatt. I think a number of states are providing
1662	support to drinking water systems in their state,
1663	particularly through the set-asides, the technical assistance
1664	and I think that is going to continue to be a focus. But
1665	there are broad opportunities through the drinking water SRF
1666	to support both infrastructure investments and also to
1667	support technical assistance and operator certification and
1668	strengthening in terms of the capacity of drinking water
1669	systems. So there are broad eligibilities that are provided
1670	through that tool.
1671	Mr. Walberg. Okay, thank you and I appreciate your
1672	responses. I yield back.
1673	Mr. Shimkus. The gentleman yields back his time. The
1674	chair recognizes the gentleman from California, Mr. Peters,
1675	for 5 minutes.
1676	Mr. Peters. Thank you, Mr. Chairman, and thanks to the
1677	witnesses for being here. I had two questions, one for Mr.
1678	Grevatt. Dr. Grevatt, studies tracking PFOS in marine
1679	organisms and ocean waters, PFOS was added to the Stockholm
1680	Convention on Persistent Organic Pollutants in 2009, and we NEAL R. GROSS

1681	are not party to that Convention but is EPA doing anything to
1682	monitor coastal waters for these compounds and are you
1683	working with other countries to control the spread of these
1684	contaminants?
1685	Mr. Grevatt. Thank you. So EPA is engaged as I noted
1686	in the broad characterization of drinking water supplies. We
1687	also have ongoing monitoring activities in watersheds. As I
1688	mentioned, the Cape Fear watershed has been an important area
1689	of work. And so I think as we get into estuarine
1690	environments, those are areas where we are thinking about the
1691	presence of these compounds. I think our primary initial
1692	focus has been around issues that immediately affect public
1693	health in making sure that we are addressing the needs of
1694	communities.
1695	Mr. Peters. Okay. I would love to be updated on any
1696	activity on that.
1697	Mr. Grevatt. We would be glad to follow up with you on
1698	that.
1699	Mr. Peters. Thank you.
1700	And, Ms. Sullivan, I had a question about firefighting
1701	foams. You noted that it was a small part of the problem in
1702	terms of overall volume, but it looks to me like the military
1703	specs require fluorine compounds and I wanted to know kind of NFALR GROSS

1704	how you see progress in moving away from that and does that
1705	requirement interfere with your work in dealing with the
1706	toxicity of these particular chemicals?
1707	Ms. Sullivan. Thank you for that question. The current
1708	military specification requires a certain performance as well
1709	as a makeup and part of that is driven by the need to be able
1710	to fight fires associated with aircraft quickly and
1711	efficiently. It is managed by the Department of the Navy
1712	because it is highly important that when we have shipboard
1713	fires that we have the ability to fight those fires very
1714	rapidly. We are working carefully with the current suppliers
1715	to determine what levels are in those compounds, the current
1716	formulations.
1717	In terms of research that we are investing in on a
1718	fluorine-free, it is basic research at this time, bench scale
1719	research. But we are committed to continuing that research
1720	to ultimately, hopefully, produce a product that does in fact
1721	meet our critical mission needs and is in fact fluorine-free.
1722	Mr. Peters. Good. I think that will be helpful
1723	throughout the economy and in a number of applications as
1724	well. So thank you very much for being here, and I yield
1725	back.
1726	Mr. Shimkus. The gentleman yields back his time. The

1727	chair now recognizes the Birthday Boy, Dr. Carter, for 5
1728	minutes.
1729	Mr. Carter. I appreciate that, Mr. Chairman.
1730	Ms. Sullivan
1731	Mr. Shimkus. You are very red.
1732	Mr. Carter. Yes, I am. I am. Sorry, I got my notes
1733	mixed up here.
1734	Ms. Sullivan, you mentioned in your testimony about the
1735	actions that the Department of Defense is taking not only in
1736	providing the clean drinking water, but also in the
1737	remediation efforts. And I was just wondering, I am
1738	interested in learning more about how you actually go about
1739	notifying the individuals on these installations and what the
1740	communication structure looks like.
1741	Ms. Sullivan. Well, first of all, happy birthday, sir.
1742	Mr. Carter. Thank you.
1743	Ms. Sullivan. Each of the military installations this
1744	is voluntary on their part. We encourage military
1745	installations and the communities to establish what we call
1746	restoration advisory boards and these boards are populated by
1747	local citizens who want to learn about the cleanup going on
1748	on those bases. It is voluntary on their part, but we
1749	support then and fund that activities.

1750	As far as on our bases, we have sophisticated
1751	notification systems for the populations present on the
1752	installations to make sure the information gets out and in
1753	full consistency with the Safe Drinking Water Act where we
1754	are in fact the purveyor. We do the routine monitoring and
1755	issue the consumer confidence reports on top of routine
1756	correspondence with the citizens on the base.
1757	Mr. Carter. So you are providing them with bottled
1758	water; is that right?
1759	Ms. Sullivan. It depends on the situation, sir, and
1760	what their choices are. In some cases we may hook them up to
1761	an alternative water supply or if in some cases they want
1762	bottled water, or we may install some sort of granulated
1763	activated carbon solution. It depends on the circumstance.
1764	Mr. Carter. But whichever way you do it, you do it
1765	until the remediation is completed.
1766	Ms. Sullivan. Correct.
1767	Mr. Carter. Okay, good. What types of sites? Is there
1768	a particular type of site that you see the most contamination
1769	on?
1770	Ms. Sullivan. It is interesting it is a range of sites.
1771	A lot of it is associated with as you can understand
1772	firefighting activities, training mostly. The newer sites NEAL R. GROSS

for us that we have to go and explore are crash sites. So usually with the firefighting sites there has been some other chemical or compound that has been used, so we have already done a certain amount of investigation. However, the crash sites are now newer that it is a challenge for us to go out and identify where those sites were and understand the circumstances around them.

Mr. Carter. Good, thank you very much.

Dr. Grevatt, you mention in your testimony that there were four significant actions that you were considering when you were making these recommendations for PFOS and for the contaminated areas. Can you explain those four to me very quickly?

Mr. Grevatt. Yes, certainly. So the first is to explore the development of a national primary drinking water regulation for PFOA and PFOS. There are important considerations that we have to work through. That is ongoing right now. The second is exploring the listing of PFOA and PFOS as hazardous substances under CERCLA. There are many statutory mechanisms for achieving that goal that is very important in terms of our ability to order cleanup actions and to recover costs that EPA may expend for those actions.

The third is development of groundwater cleanup goals

1796	under our waste cleanup programs for these substances, very
1797	important in terms of addressing contaminated sites. And
1798	then the final one is developing toxicity values for two
1799	additional PFAS substances, those are GenX and PFBS. And we
1800	are hoping to have those draft values available for public
1801	review and comment in the coming weeks.
1802	Mr. Carter. Do you have a timeline on all four of these
1803	or on the different steps?
1804	Mr. Grevatt. Right. So as I noted, the toxicity values
1805	is probably the closest to being completed and we are looking
1806	towards the coming weeks to have those completed. The
1807	groundwater cleanup recommendations are currently undergoing
1808	interagency review so that process is actively underway. The
1809	last two will be addressed in the National Management Plan
1810	which our goal is to have the completed by the end of the
1811	calendar year in terms of identifying the path forward on
1812	these important actions.
1813	Mr. Carter. Great. Well, thank you both in your work
1814	on this, very challenging.
1815	Thank you, Mr. Chairman. I yield back.
1816	Mr. Shimkus. The gentleman yields back his time.
1817	Seeing no further members of the subcommittee, the chair
1818	now recognizes the gentleman from Vermont for 5 minutes.

1819 Mr. Welch. Thank you very much, Mr. Chairman, a couple 1820 of things. First of all, I just want to say that I believe 1821 the Environmental Protection Agency is a vital agency to 1822 protect the health and well-being of the American people and 1823 I want to thank you for your dedicated service. 1824 Second, we have an issue in Vermont with PFOA so I want 1825 to talk a little bit about that and then ask whether you can 1826 help. But in 2014, PFOA was discovered in Hoosick Falls, 1827 which is just across the border, and in the town of 1828 Bennington on the Vermont side there was a Teflon plant, 1829 Saint-Gobain, and it turns out that hundreds of private 1830 drinking wells in Bennington are contaminated and we are 1831 trying to work through that to provide for the health and 1832 safety of the residents there. 1833 But in June 2017 I wrote to then EPA Administrator 1834 Pruitt with a couple of direct requests and all as a result 1835 of what was happening in Vermont. One was that the EPA 1836 establish a national primary drinking water regulation for 1837 PFOA; two, that PFOA and PFOS be listed as hazardous 1838 substances under CERCLA; and three, that we take action under 1839 the Toxic Substances Control Act to review and regulate PFCs 1840 and I continue to request that those steps be taken. 1841 And, in addition, I believe and many in Vermont believe

1842 that there are several additional steps that the EPA must 1843 take on this front: One, establish toxicity profiles for the 1844 entire class of PFAS compounds; two, establish a reliable 1845 testing methodology for PFAS contamination that is present in 1846 sources other than water. For instance, how do we test milk 1847 produced from a cow drinking contaminated water or maple 1848 syrup from a tree drawing on contaminated water? 1849 Three, establish a maximum contaminant level as a 1850 backstop while providing resources to states that wish to 1851 adopt a more stringent standard; four, develop reliable and 1852 sufficient testing laboratories to identify contamination; 1853 and five, develop a national listing of products that contain 1854 PFAS. 1855 So the questions, Mr. Grevatt, I will ask you, can EPA commit to establishing toxicity profiles for the entire class 1856 1857 of PFAS compounds? 1858 Mr. Grevatt. Thank you, sir. That is a very important 1859 question. As you know, it is a broad set of compounds, 1860 actually in total many thousand compounds. And through our 1861 Office of Research and Development we are looking not only at 1862 how to develop toxicity values for individual compounds like 1863 PFBS and GenX, but how to start to look at the broader suite

of compounds and look at them holistically.

1864

That is still a

1865	research area. It is going to take some time for that work
1866	to advance, but that is a focus area for us and we are
1867	working with other parts of the federal government on those
1868	questions as well.
1869	Mr. Welch. Can you keep us posted on that?
1870	Mr. Grevatt. Yes, sir. We would be glad to do so.
1871	Mr. Welch. The clock is ticking on that.
1872	Two other questions, as I mentioned we currently lack a
1873	publicly available list of products that contain PFAS and
1874	related chemicals. We would like the EPA to compile that
1875	list. If you can't, what resources would the EPA need and
1876	what barriers are preventing you from doing that?
1877	And, finally, is the EPA currently investigating ways in
1878	which to test for contamination of non-water products like
1879	the milk example, the maple syrup example I just mentioned?
1880	Mr. Grevatt. Yes. Let me take the last question first,
1881	and absolutely yes, we are doing that. One of our
1882	commitments is to develop additional analytical methods for a
1883	media other than drinking water understanding how important
1884	that is in your state. And I had the opportunity to visit
1885	your great state just last week with the Environmental
1886	Council of the States meeting there and talk about these
1887	issues there. And our TSCA program is working right now

1888	comprehensively to get a broader view of the presence of PFAS
1889	compounds in different products. So that is an issue we will
1890	continue to work on and we will be glad to circle back with
1891	you and talk about that further.
1892	Mr. Welch. All right. Well, I would like to have you
1893	stay in touch with us as progress is being made.
1894	Mr. Grevatt. We would be glad to do so, sir.
1895	Mr. Welch. Thank you very much. I yield back.
1896	Mr. Shimkus. The gentleman yields back his time. The
1897	chair now recognizes the former chairman of the full
1898	committee, Fred Upton, for 5 minutes.
1899	Mr. Upton. Well, thank you, Mr. Chairman. Again I
1900	appreciate this hearing and I have got a lot of questions. I
1901	want to thank my colleagues on both sides of the aisle as we
1902	explore this situation for sure.
1903	But, Dr. Grevatt, I am going to start with you. As you
1904	know, the Safe Drinking Water Act that passed out of this
1905	committee was very bipartisan. We learned a lot of lessons
1906	from Flint. One of the lessons that we learned ended up in
1907	legislation that President Obama signed that killed the Upton
1908	bill which requires that the EPA when they know about
1909	situations of contamination that they are required within 24
1910	hours to inform the Governor, develop to work with the state NEAL R. GROSS

1911 on a plan to implement that. 1912 So my first question when I learned about Parchment, 1913 Michigan was is the EPA involved and the answer was yes. So I am very grateful for that and I brought that to the 1914 1915 attention of the Acting Administrator Wheeler when I talked 1916 to him about it on the phone within a couple of days. 1917 I am glad to hear about the National Management Plan 1918 coming to Michigan. It is something that we want in Michigan 1919 and I know that my colleagues on both sides of the aisle will 1920 very much encourage that to happen and I would urge that as 1921 part of that visit that you come to Parchment as well where 1922 we have had a lot of different meetings. 1923 In mid-July, before we learned about Parchment, I would 1924 note that Congresswoman Dingell, Kildee, and myself and other 1925 members of the Michigan delegation urged the EPA to review 1926 the toxicology profile and if, in fact, it needed to be 1927 adjusted below 70 parts per trillion that they do so in an 1928 expedited process. Quick question, is that happening? 1929 can we do to expedite that process. What is the timing of 1930 that? 1931 Mr. Grevatt. Thank you, Congressman. So we continue to 1932 look very carefully at all of the scientific information that is coming forward related to PFOA and PFOS. 1933 That is the

1934 focus of the drinking water health advisory and we will 1935 continue to consider that information going forward as we 1936 explore whether those values need to be changed. 1937 At this time EPA does not have plans to change the 1938 drinking water health advisory, lifetime health advisory for 1939 PFOA and PFOs, but we will continue to watch the literature and stay focused on this. 1940 1941 Mr. Upton. I know that there is legislation that I am a 1942 cosponsor of that is going to encourage EPA to look at that 1943 so see what happens as that moves. 1944 Ms. Sullivan, your role is very important here, 1945 appreciate you being here. I have to say that I was very 1946 troubled reading your testimony last night in that on page 3 1947 you indicate that you will share information, the Department 1948 of Defense will share information in an open and transparent 1949 manner. 1950 As you know, I wrote a letter back on August 1st 1951 relating to the National Guard Base in Battle Creek. 1952 data had been taken 3 months prior to that, so 4 months now, 1953 and MDEQ, Department of Environmental Quality in Michigan, 1954 had independently found that there were perhaps as much as 1955 21,000 parts per trillion at that site. 1956 In addition, our Governor Snyder sent a letter regarding

1957	Wurtsmith and I think Selfridge as well, which I will put
1958	into the record. Again prior to August 1st, there was a
1959	public meeting held on July 30th. Yesterday, last night, I
1960	received a draft report of which I will put this page into
1961	the record. I will note that it is a draft, but on page ES-4
1962	they tested 14 different sites at Battle Creek. Nine of the
1963	sites were over a thousand parts per trillion. Four of the
1964	sites, one was 3,800 parts per trillion; 4,300 parts per
1965	trillion; 25,000 parts per trillion; and 53,000 parts per
1966	trillion.
1967	So I would say as a non-engineer, I think Mr. McKinley
1968	would acknowledge that there is little doubt that it came
1969	from that site. So the questions are where is it moving?
1970	There are rivers that are close by. I don't think that there
1971	has been a real identification of private wells that are
1972	close by, but what is the impact on those? What is the
1973	impact on the community itself?
1974	But how is that full and transparent when it is now 4
1975	months after the testing? As we saw in Parchment, it was 4
1976	days after the testing that we made it public.
1977	Ms. Sullivan. Sir, thank you for the question. I am
1978	not familiar with the specifics in Battle Creek. I actually
1979	lived there for a period of time so I am familiar with the

1980	area, but I will have to get with the Department of the Army
1981	and get the specifics.
1982	Mr. Upton. Well, did they share this with you before
1983	today?
1984	Ms. Sullivan. No, they have not. But I will
1985	Mr. Upton. I mean this was literally dropped off at my
1986	office late yesterday afternoon as I understand it. I didn't
1987	see it until this morning.
1988	Ms. Sullivan. I have not seen it, sir. But I will get
1989	with the Army and we will get the answers for you.
1990	Mr. Upton. I look forward to that because I want to,
1991	you know, I agree that we ought to be that information
1992	ought to be in an open and transparent manner as you
1993	indicated in your testimony, and it is not when it is 4
1994	months late, let alone, you know, how do we deal with this in
1995	the long-term way for those individuals that are certainly
1996	impacted? Not only the servicemen and women, but also the
1997	folks that are living close let alone those that are along
1998	the Kalamazoo River.
1999	Ms. Sullivan. Yes, sir.
2000	Mr. Shimkus. The gentleman's time has expired. It is
2001	an Air National Guard Base so not an Army's.
2002	Ms. Sullivan. I apologize, sir. Yes.

2003	Mr. Shimkus. Not an Army post.
2004	Ms. Sullivan. I always think of Fort Custer. I am
2005	sorry.
2006	Mr. Shimkus. All right. The chair now recognizes the
2007	gentleman from California, Congressman Cardenas, for 5
2008	minutes.
2009	Mr. Cardenas. Thank you very much. I may be on the
2010	other side of the country from my colleague, Ms. Dingell,
2011	next to me, but we share many of the same concerns, water and
2012	the effects of chemicals. And our water systems in
2013	California and Los Angeles are in some cases very dire so the
2014	EPA's activity and determination is very critical to every
2015	American all across the country.
2016	I note that Mr. Pruitt may be gone, but I wonder if the
2017	disinterest that I felt from him and his when he was there in
2018	human and environmental health still remains. Hopefully the
2019	commitment has changed. I didn't have much confidence in him
2020	and his ability to make sure that what is important to the
2021	EPA and to American citizens is consistent.
2022	Dangerous chemicals are contaminating our drinking water
2023	and we have known about it for years. We also know the
2024	extremely harmful effects that chemicals have on people
2025	especially our children and seniors. Even this EPA has

2026	determined that chemicals like perchlorate and PFAS are
2027	dangerous to human health at levels found in our drinking
2028	water.
2029	Perchlorate, for example, disrupts the normal function
2030	of the thyroid which is necessary for regulation of the heart
2031	rate and blood pressure. For babies, thyroid health is
2032	crucial for the development of the central nervous system.
2033	Yet, EPA has not established a national drinking water
2034	standard for perchlorate despite established research and
2035	proven science.
2036	Dr. Grevatt, can you tell the committee what the mission
2037	of the EPA is?
2038	Mr. Grevatt. Yes, sir, protecting human health and the
2039	environment.
2040	Mr. Cardenas. I love the fact that it is human health
2041	and the environment in that order. And I don't personally
2042	believe that there should ever be a disconnect between those
2043	two. I think we can do justice by minding both and doing
2044	what is right in both instances. So it is not, there is
2045	nothing in the EPA that says the EPA's mission is to protect
2046	industry or make compliance easier for industry, does it?
2047	Mr. Grevatt. Sir, the focus is on protecting human
2048	health and the environment and working broadly across the NEAL R. GROSS

2049	country to achieve that goal.
2050	Mr. Cardenas. Okay, good. And being the largest
2051	economy in the world I understand, and being a former
2052	businessman myself I understand how important it is that we
2053	try to strike that balance of responsibility and regulation
2054	and laws, et cetera, so that we can have a healthy
2055	environment, healthy human beings, and also have the
2056	healthiest economy in the world. So I appreciate your
2057	clarity on that.
2058	Dr. Grevatt, when did EPA determine that a drinking
2059	water standard for perchlorate would meaningfully reduce risk
2060	for customers of public drinking water systems?
2061	Mr. Grevatt. This was a number of years ago in 2012.
2062	Mr. Cardenas. 2012. So why was that determination made
2063	or where did that come from?
2064	Mr. Grevatt. Sir, that was made following the key
2065	factors under the Safe Drinking Water Act that this is a
2066	compound that was determined to present a threat to the
2067	health of persons, that it occurred at a level and frequency
2068	in the nation's drinking water supplies, and that in the sole
2069	judgment of the Administrator that a national primary
2070	drinking water regulation was necessary to protect public
2071	health.

2072	Mr. Cardenas. Do we have a national standard today?
2073	Mr. Grevatt. We do not yet. We are engaged in that
2074	process of developing the proposed rule.
2075	Mr. Cardenas. Okay. You are engaged in that and what
2076	is your hope timeline wise? I know you don't have a crystal
2077	ball, but I am sure there is a lot of moving parts and there
2078	is a lot to be done before we set that or excuse me, you set
2079	that. So what do you think?
2080	Mr. Grevatt. Yes, sir. We are under consent decree for
2081	this process right now and we have interacted with the court
2082	to request a bit more time to address the latest science that
2083	came in through our process and so we are hoping to have a
2084	proposed rule available in the coming months.
2085	Mr. Cardenas. Okay. Oh, so a bit more time, you are
2086	talking about your hope is in the coming months.
2087	Mr. Grevatt. Yes, sir.
2088	Mr. Cardenas. Not in the coming years.
2089	Mr. Grevatt. Yes, sir.
2090	Mr. Cardenas. That is awesome. This administration has
2091	been asking courts on various issues for more time, more
2092	time, more time, so I am glad to your response and hopefully
2093	you will meet your expectation and ours as well.
2094	How long has the EPA known about the risks of PFAS in

2095	drinking water?
2096	Mr. Grevatt. So we have known about the potential risks
2097	of PFAS in drinking water for a number of years and that is
2098	why we engaged with the manufacturers in the phase-out of
2099	these compounds over the last decade or so. And so that
2100	phase-out has been achieved, we followed that up with
2101	significant new use rules under TSCA to make sure that we
2102	weren't relying on the voluntary agreement, but we actually
2103	had the ability to require notification of EPA before these
2104	compounds would be reintroduced.
2105	So it has been a number of years that we have been
2106	actively engaged in this. And then I think you are aware
2107	that we completed this national drinking water survey of the
2108	presence of PFAS compounds in the nation's drinking water
2109	supplies over the last several years as well.
2110	Mr. Cardenas. Thank you, Doctor. I appreciate it. And
2111	I yield back.
2112	Mr. Shimkus. The gentleman yields back his time.
2113	Just a side note, you want to know that Dr. Grevatt's
2114	professional educational background as a toxicologist; is
2115	that correct?
2116	Mr. Grevatt. That is correct.
2117	Mr. Shimkus. Thank you. The chair now recognizes the NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS

2118	very patient Congressman Sarbanes from Maryland.								
2119	Mr. Sarbanes. Thank you, Mr. Chairman. Thank you all								
2120	for being here.								
2121	As you know, in 2018, ATSDR had prepared this study								
2122	which showed the safe level of PFAS may be closer to 7 parts								
2123	per trillion not 70. And at that time, officials at EPA and								
2124	the DOD contacted the White House to express concerns about								
2125	that report being released and what the public relation								
2126	fallout might be and there is some emails related to that								
2127	that were released in response to a FOIA request from the								
2128	Union of Concerned Scientists.								
2129	I wanted to ask a couple of questions about that because								
2130	to be candid I have grown increasingly concerned about lack								
2131	of transparency within the Trump administration and its								
2132	various agencies. So this goes to that concern.								
2133	So, Ms. Sullivan, in these emails that were released								
2134	pursuant to the FOIA request somebody wrote, We, EPA and DOD,								
2135	cannot seem to get ATSDR to realize the potential public								
2136	relations nightmare this is going to be. At the time those								
2137	emails were sent, were you aware of any DOD officials who								
2138	shared those concerns?								
2139	Ms. Sullivan. Sir, I am so glad you asked that								
2140	question. When this process was going on my communications NEAL R. GROSS								

2141	with the Office of Management and Budget were solely to ask
2142	when it was going to happen and what the communication plans
2143	would be. I did not provide any assessment of whether that
2144	was good or bad, it was simply asking when would it be
2145	released and what would the risk communication
2146	Mr. Sarbanes. So I appreciate that but were you aware
2147	of any DOD officials who were sharing the concerns expressed
2148	in that email?
2149	Ms. Sullivan. No, I was the voice, sir.
2150	Mr. Sarbanes. Okay. And I take it then you were not
2151	aware of efforts by DOD officials to impede the release of
2152	the report?
2153	Ms. Sullivan. No, I was not aware of any efforts.
2154	Mr. Sarbanes. Were you aware of any, or are you of any
2155	internal DOD review or response that relates to the matters
2156	discussed in the email?
2157	Ms. Sullivan. We have reviewed the draft document and
2158	submitted comments to the ATSDR and will respect the process
2159	that ATSDR goes through to develop the final document. I
2160	want to emphasize that we, and Dr. Grevatt has mentioned this
2161	before, we believe it should be peer-reviewed based on sound
2162	science, developed in a transparent manner, and we support
2163	the outcome of that.

2164	Mr. Sarbanes. Well, I appreciate it and I just worry
2165	that concerns about public relations can lean on the scale in
2166	a way that could undermine the scientific conclusions and
2167	judgments and assessments that are being made.
2168	Dr. Grevatt, we have seen some lack of transparency
2169	issues at the EPA as well. Under the previous administrator,
2170	Scott Pruitt, there were secret calendars hiding meetings
2171	with industry leaders, there was an undermining of career
2172	employees and scientific advisors. I know you are a career
2173	employee. I wonder if you have experienced any pressure from
2174	political folks at EPA or other administration officials to
2175	make decisions on a basis other than a scientific basis.
2176	Mr. Grevatt. I personally have not.
2177	Mr. Sarbanes. And are you or were you aware of the
2178	emails I just referenced at the time that they occurred?
2179	Mr. Grevatt. At the time I wasn't aware of the specific
2180	emails, but I was aware as Ms. Sullivan indicated of the
2181	strong interest in making sure that we had a coordinated
2182	communications effort across the federal government on these
2183	issues.
2184	Mr. Sarbanes. And I guess that is the concern, because
2185	you could dress up what might be a reflex to stop the release
2186	of something or slow it down significantly, notwithstanding NEAL R. GROSS

2187	the scientific basis for getting it released. That could be
2188	dressed up as just wanting to kind of get all the ducks in a
2189	row and so forth and that is a fine line. And I am concerned
2190	based on some of the exchange of those emails that it may
2191	have tipped into a place where concern about PR, the public
2192	revelation of these new standards might have taken over the
2193	scientific judgment that should have been in place.
2194	So I will continue to bring some interest and attention
2195	to this, but I thank you for your testimony. I yield back.
2196	Mr. Shimkus. The gentleman yields back his time.
2197	Seeing no further members wishing to ask questions, I
2198	want to thank the first panel for their time, their due
2199	diligence, and their answering of the questions. I think you
2200	can get an impression that this subcommittee and this
2201	committee they are pretty smart folks up here and have done
2202	their homework.
2203	So this is I can't even pronounce some of these
2204	chemicals, but at least I think it was a good hearing on this
2205	and we look forward to addressing things again. So with that
2206	thank you very much and we will sit the second panel down.
2207	[Recess.]
2208	Mr. Shimkus. We want to thank our witnesses for being
2209	here today and take the time to testify before the

2210	subcommittee. The second panel consists of the following
2211	members: Ms. Lisa Daniels, Director of Bureau of Safe
2212	Drinking Water, Pennsylvania Department of Environmental
2213	Protection on behalf of the Association of State Drinking
2214	Water Administrators; Mr. Sandeep Burman, Manager of Site
2215	Remediation and Redevelopment, Minnesota Pollution Control
2216	Agency on behalf of the Association of state and Territorial
2217	Solid Waste Officials, both organizations I have worked with
2218	closely; Ms. Carol Isaacs, Director of Michigan PFAS Action
2219	Response Team, the czarina as was referred to earlier; and
2220	think soon to join us, Ms. Emily Donovan, Co-founder of Clean
2221	Cape Fear; and Mr. Erik Olson, Senior Director of Health and
2222	Food, Healthy People & Thriving Communities Program with the
2223	Natural Resources Defense Council.
2224	We appreciate you all being here today. We will begin
2225	the panel with Ms. Daniels, and you are now recognized for 5
2226	minutes to give your opening statement.

STATEMENTS OF LISA DANIELS,, BUREAU OF SAFE DRINKING WATER,
PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION; SANDEEP
BURMAN, MANAGER, SITE REMEDIATION AND REDEVELOPMENT,
MINNESOTA POLLUTION CONTROL AGENCY; CAROL ISAACS, DIRECTOR,
MICHIGAN PFAS ACTION RESPONSE TEAM, EXECUTIVE OFFICE OF
GOVERNOR RICK SNYDER; EMILY DONOVAN, CO-FOUNDER, CLEAN CAPE
FEAR; AND, ERIK OLSON, SENIOR DIRECTOR, HEALTH AND FOOD,
HEALTHY PEOPLE & THRIVING COMMUNITIES PROGRAM, NATURAL
RESOURCES DEFENSE COUNCIL

STATEMENT OF LISA DANIELS

Ms. Daniels. Good morning, Chairman Shimkus, Ranking
Member Tonko, and members of the subcommittee. Thank you for
the opportunity to talk about PFAS in drinking water. My
name is Lisa Daniels and I am the president of the
Association of State Drinking Water Administrators whose
members include 50 state drinking water programs, five
territorial programs, the District of Columbia, and the
Navajo Nation. Our members have primacy for implementing the
Safe Drinking Water Act and they are on the front lines every
day providing technical assistance, support, and oversight to
our public water systems which is critical to protecting
public health.

2250 I am also, so my other full-time job, I am also the director of the Bureau of Safe Drinking Water within the 2251 2252 Pennsylvania Department of Environmental Protection. 2253 Today I would like to discuss ASDWA's concerns about 2254 PFAS and then really delve into three key recommendations we 2255 would like to make. PFAS compounds of course have been a 2256 growing concern for the drinking water community for more 2257 than a decade. To date, PFAS has been found in groundwater 2258 in at least 38 states, and I think that is an important 2259 number to remember, 38 states. 2260 The solubility, mobility, and bioaccumulative properties 2261 of PFAS continue to heighten concerns about the potential 2262 adverse health effects and there are many unanswered 2263 questions. For example, where are these compounds being 2264 manufactured and used in commerce, what are there toxicity 2265 levels, how are they impacting the environment and public 2266 health, and these are just to name a few. 2267 In 2016, EPA finalized the lifetime health advisories 2268 for two of the most common PFAS compounds, PFOA and PFOS. 2269 June of 2018, as folks have remarked, ATSDR released a draft

advisory number. The lack of a federal standard and, really,

tox profile that proposed minimal risk levels and they

proposed it at different levels than the EPA's health

2270

2271

this inconsistent health risk number have really led to increased public concern and driven some states to establish their own PFAS action levels. However, there are also other states that cannot take any independent action because they are prevented from being any more stringent than EPA. With all of this together it is really no wonder that the average American is left questioning whether their drinking water is safe. In my own state of Pennsylvania, our Environmental Cleanup Program is conducting site investigations at about 11 sites across the state. investigations that we are doing are where there are levels above EPA's health advisory of 70, because we are fortunate that we can recognize health advisory levels in Pennsylvania and we do have authority to look at unregulated contaminants at those levels. However, certainly the adequacy of our actions are being called into question because of differing numbers that we see coming out from ATSDR and potentially some other states. do recognize the science is still evolving PFAS and risk to human health. There is a whole host of analytical and technology challenges and data gaps surrounding this issue. And, really, what folks need are more robust information on

health effects, analytical methods, and treatment efficacy.

2273

2274

2275

2276

2277

2278

2279

2280

2281

2282

2283

2284

2285

2286

2287

2288

2289

2290

2291

2292

2293

2294

So clearly more work is needed, more research and data are needed to really help support a consensus-based standard and tox values. ASDWA partnered with several organizations including ECOS, Aqua, and EPA to help chart a path forward for states and federal agencies. We have provided extensive written comments and recommendations to EPA and other federal agencies on two different occasions. The first one was back in January of this year, and then a second set of comments was submitted in July. Essentially we are asking these folks to work together to help solve this issue. Anybody that is interested in seeing the comments that we wrote, all of that information is on our website as well as information that we continue to gather and pull together based on other states.

ASDWA absolutely supports the commitments the EPA made during the National Leadership Summit and we think that is a solid step forward but more work is needed. In terms of ASDWA recommendations, states' water systems and the public need national leadership now to address this issue. And for us, the question is not whether to regulate but when and how, but make sure it is done using sound science.

The three key areas we would like to suggest: We believe PFAS must be addressed at the national level using a holistic approach and we ask Congress to direct all the federal

2319	agencies to develop a unified message for risk.
2320	Number two, we ask Congress to provide additional
2321	funding to EPA and the states to deal with this issue.
2322	Currently we do think folks are diverting money away from the
2323	core program in order to address this issue which is causing
2324	problems there.
2325	Third, Congress should recommend EPA to expand and
2326	coordinate across all of the programs and media. And with
2327	that we look forward to continuing to work with you to solve
2328	this issue. Thank you.
2329	[The prepared statement of Ms. Daniels follows:]
2330	
2331	**************************************

2332	Mr.	Shimkus.	Thank you.					
2333	The	chair now	recognizes	Mr.	Burman	for	5	minutes.

STATEMENT OF SANDEEP BURMAN

Mr. Burman. Good morning, Chairman Shimkus, Ranking
Member Tonko, and members of the subcommittee. Thank you for
the opportunity to speak at today's hearing. My name is
Sandeep Burman and I am the manager of Site Remediation and
Redevelopment for the Minnesota Pollution Control Agency. I
am also a member of the board of directors of ASTSWMO. While
Minnesota is a member of ASTSWMO, I am here today speaking on
behalf of the Association.

As you know, ASTSWMO is an association representing the waste management and cleanup programs of the 50 states, five territories, and the District of Columbia. As you know and as you heard from prior testimony today, per and polyfluoroalkyl substances, PFAS, have emerged as one of the most complex and challenging environmental and public health issues to have confronted the country in recent times. Many of ASTSWMO's member states are reporting widespread impact and risks from PFAS. Alabama, Colorado, Minnesota, New Jersey, Vermont are a few states who have provided summaries that are included in ASTSWMO's written testimony, but many states have similar stories to share.

As states conduct additional sampling and response to

the continually evolving understanding of PFAS and associated risks, it is expected that more releases and impacts will be discovered from both historical and current sources. The problem is therefore likely going to assume even greater magnitude and even more serious implications for public health and the environment.

The current absence of established federal regulatory standards for these compounds is creating uncertainty as public drinking water systems, wastewater treatment systems, regulatory agencies, responsible parties, and communities are attempting to address risks to public health and the environment. There is an urgent need for federal standards including reference doses, drinking water standards, surface water standards, and remediation standards that can be used to reliably address ongoing public health concerns.

A comprehensive system of national standards will provide a level of certainty and consistency for environmental permitting, compliance, and cleanups. For instance, when it comes to drinking water, PFOS and PFOA are the only two chemicals from the PFAS family that currently have a federal guidance value. These were issued in 2016 by the EPA in the form of a non-enforceable lifetime health advisory of 70 parts per trillion.

However, many states that are investigating PFAS impacts in drinking water cannot limit their efforts to just PFOS and PFOA. This is because they are detecting a mix of PFAS in the groundwater and drinking water. As a result, some states have had to develop their own standards and guidance for the various PFAS that have been detected in their drinking water and groundwater while other states have adopted the EPA lifetime health advisories for PFOA and PFOS.

However, there are differences between the various state standards and many of the state standards for PFOS and PFOA differ from the EPA advisory values for those two chemicals. As you can imagine, this causes questions and confusion for the public as well as for regulated parties and regulators themselves.

National groundwater standards are therefore urgently needed for the PFAS family to promote consistent and comprehensive cleanups across the country. This will assist states that do not currently have promulgated standards as well as those that may lack the resources to ever have their own standards. At the same time there will be the need to recognize the PFAS standards that are promulgated by states especially if they are lower than the corresponding federal ones.

States are also unclear on how responsible parties can be requires to remediate PFAS contamination. Therefore, a national regulatory framework not just guidance or recommendations is needed for the cleanup of PFAS in groundwater and drinking water.

In May of 2018, EPA hosted a National Leadership Summit in Washington, D.C. to take action on PFAS. EPA announced several significant actions the Agency would take on PFAS primarily focused on PFOS and PFOA. ASTSWMO acknowledges these EPA proposed actions has been important first steps and appreciates the collaborative efforts EPA has made since the summit on these actions.

However, ASTSWMO is still recommending to EPA that in addition to the action plan outlined at the summit EPA should closely examine an approach that will treat the multiple PFAS as a class or a mixture of chemicals for the purpose of designating them as CERCLA hazardous substances or RCRA hazardous waste. This will ensure that there is clear regulatory authority to require responsible parties to investigate an immediate contamination from the multiple PFAS that are already being discovered as contaminates of concern across sites around the country beyond just PFOS and PFOA.

There is also a clear need to coordinate efforts at the

2426	national level on all scientific and policy issues pertaining
2427	to PFAS. ASTSWMO has taken and will continue to take many
2428	steps to assist with this national collaboration. With that
2429	I thank you again on behalf of ASTSWMO for this opportunity
2430	to offer testimony and I will be happy to take any questions
2431	later.
2432	[The prepared statement of Mr. Burman follows:]
2433	
2434	********INSERT 5******

2435	Mr. Shimkus. Thank you very much.
2436	The chair now recognizes Ms. Carol Isaacs, the director
2437	of Michigan's PFAS Action Response Team. You are recognized
2438	for 5 minutes.

2439 STATEMENT OF CAROL ISAACS 2440 2441 Thank you so much. Good morning, Chairman Ms. Isaacs. 2442 Shimkus and Ranking Member Tonko, other members. I also want 2443 to recognize our Congressman Upton and Walberg and 2444 Congresswoman Dingell from Michigan and recognize them for 2445 their steadfast bipartisan focus on this issue. Michigan 2446 appreciates that. 2447 My name is Carol Isaacs. I am the director of the 2448 Michigan PFAS Action Response Team, better known as MPART. 2449 represent a single state, Michigan, this morning, but our 2450 experience is national and all states are experiencing some 2451 or all of what we are experiencing. Michigan is one of a 2452 growing number of states throughout the country dealing with 2453 a suite of chemicals collectively called PFAS. 2454 To address this public health threat, on November the 2455 13th, 2017, Governor Rick Snyder issued a executive directive 2456 forming MPART. This unique structure integrates ten state 2457 department agencies' departments work effectively to enhance 2458 cooperation and coordination among local, state, and federal agencies. And all of those, all of those are our partners. 2459 2460 The Response Team has been instrumental in creating 2461 investigation and response protocols to identify and protect

2462 regions of the state with known or possible PFAS 2463 contamination, threatens the drinking water of our residents. 2464 The many proactive steps MPART has taken since the 2465 formation in November of '17 include the following: 2466 established a new cleanup criteria of groundwater within a 2467 few weeks of the establishment of MPART. I have been present 2468 for 9 months in my state in this capacity. 2469 MPART has identified 35 PFAS states which include public 2470 water supplies and military bases and industrial sites and landfills. We have done more than 6,000 tests and overseen 2471 2472 the delivery of alternate water to more than 1,600 households 2473 and overseen the installation of much larger than 700, it is 2474 1,200 filtration systems for homes. 2475 We have met with 200 wastewater treatment personnel in 2476 our landfill industry working cooperatively with them on this 2477 issue. MPART has created an independent science board 2478 advisory panel to provide information to us and we will 2479 expect results before the end of the year. We have engaged 2480 70 external state and national groups on PFAS and continue to 2481 meet with our local residents and local communities. We will 2482 meet two to three times a month in some community from 2483 Michigan. 2484 Our legislature appropriated an additional 23 million at

the end of '17 to allow us to do our proactive investigation on PFAS. We are characterized by searching for this contamination. Importantly, MPART has undertaken the most comprehensive state drinking water survey in the nation. It far exceeds the survey of large cities over 10,000. It includes all public water systems that serve more than 25 people and that includes our mobile home parks, so it is really, really extensive. We will have that completed before the year is out.

The wisdom of a comprehensive survey of drinking water is important because this survey has resulted in covering the drinking water for the vast majority of our residents.

Through this survey we were able to find and mitigate high levels of PFAS exposure in our drinking water with one of our communities, Parchment. You heard about Parchment a little bit earlier. Those levels were 20 times higher than the EPA advisory level.

In a matter of hours, the state was able to have a very effective response. We worked diligently with our federal and local partners. In that short period of time we were able to alert the community from our testing results, pay for bottled water to be distributed, and assisted in helping to provide a new water source from a nearby community.

We want to focus on our proactive and aggressive approach from PFAS that resulted in preserving the public health of more than 3,000 of the people in this city. We also thank this community for their cooperation and willingness to respond to this situation in such a unified manner. It was really a very wonderful effort and worked very well. We continue in this community to test their private wells now that we are aware that they have some contamination.

I am going to close by indicating why this is a national issue. We looked to EPA for guidance for all the reasons you have already heard. We need that guidance because DOD follows that. We also need a uniform understanding of the relationship of these chemicals. When it comes to health care and cleanup standards we need a cooperation between ATSDR and EPA and we need to look to the FAA to work with us because they work with the DOD. When we have regulation from these entities then the state matches the military and the airports and we are all doing the same thing, the most effective thing.

In closing, USDA is needed for our food chain analysis.

And we are going to say that clean water is essential to all

Americans and we appreciate everything that Congress is doing

2531	for us at this point and we wish to have you consider in your
2532	budget priorities the funding necessary to do this. This is
2533	a national issue. The states can't do it all. We need our
2534	federal partners. We need our Congress. We need you to help
2535	us put this all together so that we can rapidly address this
2536	for the public health of the people in Michigan and across
2537	the country. Thank you very much.
2538	[The prepared statement of Ms. Isaacs follows:]
2539	*********INSERT 6******

2540	Mr. Shimkus. The gentlelady's time is expired.
2541	The chair now recognizes Ms. Emily Donovan, co-founder
2542	of Clean Cape Fear. You are recognized for 5 minutes.

STATEMENT OF EMILY DONOVAN

Ms. Donovan. Thank you, Mr. Chairman and members of the subcommittee for elevating the issue of PFAS water contamination to the highest level possible. My name is Emily Donovan and I wear multiple hats. I am a youth director at a Presbyterian Church on Wrightsville Beach. I am a wife and a mother raising 9-year-old twins, and I am also co-founder of Clean Cape Fear.

We are a water advocacy group that formed after learning DuPont Chemours was dumping large quantities of highly toxic PFAS into our primary source of drinking water, the Cape Fear River. Today I would like to speak to you as a mother who has spent the last 15 months getting a crash course in biochemistry.

Imagine waking up to headlines that the same company who spent a historic \$670 million to settle over 3,500 lawsuits in another state for poisoning their drinking water was doing the exact same thing to yours. That is exactly what DuPont's spinoff Chemours did with GenX, their C8 replacement for making Teflon, and GenX was only 12 percent of the total PFAS found in our finished tap water. I am largely here today because of a handful of dedicated scientists from North

Carolina who stumbled upon something in the Cape Fear River at alarmingly high quantities and decided to investigate it.

Due to their tireless research, we know now at least 25 different PFAS have been discovered in our finished tap water and in private wells around DuPont Chemours' facility in Fayetteville. We learned early on through court documents that DuPont Chemours has mastered the art of deception and I believe this chronic polluter has no problem exposing millions of citizens to these toxic chemicals.

It has been a year since we learned about GenX and we still know nothing about the majority of chemicals in our finished water. Not a single health official, scientist, or policymaker can tell me if the 16 mystery PFAS I found in the tap water at my children's public school are safe to drink. There are no recommended dose levels. There are no toxic mixture studies to guide me on how these chemicals interact with each other or could potentially harm my children as they grow up.

It sickens me to think that I may have harmed my children by simply raising them to drink the tap water. I will forever wonder if that choice will one day cause them major medical harm. I now send my children to school with water bottles filled with reverse osmosis water because it

2589 seems to be the only reliable filtration method to remove 2590 these toxins and our RO filters are incredibly expensive. 2591 pray daily it is enough to keep them hydrated the whole day. 2592 I worry constantly about the children drinking from the 2593 school tap water because their parents are either unaware or 2594 can't afford to access properly filtered water. 2595 It is not just parents who are worried about their 2596 We as adults are also worried about our own 2597 health. These toxic chemicals do not act equally in our 2598 Some people may never develop serious health bodies. 2599 problems while others aren't so lucky. Our state's leading 2600 PFAS toxicological researcher publicly stated the true 2601 impacts of GenX may take years to become known because cancer 2602 takes its time to reveal itself in humans. 2603 I am here to testify that Wilmington and Fayetteville 2604 area residents are already showing signs of obscure and rare 2605 cancers, immune disorders, and diseases in populations far 2606 too young to pass off as normal. How many of your friends 2607 are battling cancer? 2608 I am 41 and my friend Sarah is battling stage 3 colon 2609 cancer. My friend Tom has terminal brain and bone cancer. 2610 My friend Kara, an Operation Iraqi Freedom veteran, has stage 2611 3 breast cancer and had her gallbladder stop working.

friend Margaret has a rare bone cancer and my friend Robert has leukemia and bladder cancer. And my own husband had a benign brain tumor and almost lost his eyesight. I am frightened. We already know testicular cancer is on the rise in our region. We know thyroid cancers are nearly double the state and national averages in Brunswick and Pender and New Hanover Counties.

We need you to act swiftly now. We want a nationwide PFAS human exposure study that includes all known PFAS not just the already well documented PFOA and PFOS. We need to move beyond GenX, PFOA, PFOS, and PFBS and regulate all PFAS as a class of highly toxic chemicals, because I know and you know that you don't have time or money to individually regulate the estimated 10,000 PFAS in our water today or in use today.

We need to get these nasty toxins out of our drinking water now so no one else suffers the way we are in North Carolina. Look to the Madrid Statement for guidance that debunks the long-chain myth. Require all chemical makers provide standards for all PFAS produced including byproducts. Make the EPA begin rodent toxicology studies on all these chemicals. Mandate that public utilities nationwide conduct mandatory, comprehensive PFAS testing with the method

2635	detection limits set at 1 because the American people deserve
2636	to know every drop of these nasty chemicals that are in their
2637	drinking water.
2638	Congress should deny all federal contracts including
2639	defense contracts to chronic PFAS polluters like DuPont and
2640	Chemours. If they can't play by the rules, they don't
2641	deserve a single federal taxpayer dollar. Set parameters for
2642	an adequate period of time and require these chronic
2643	polluters pay for remediation and cleanup. And we demand the
2644	maximum contaminant level for all PFAS be set to 1 part per
2645	trillion in light of the recent CDC study citing again the
2646	Madrid Statement.
2647	Thank you so much for your time. It has been an honor
2648	to testify before your committee.
2649	[The prepared statement of Ms. Donovan follows:]
2650	
2651	*********INSERT 7******

2652	Mr. Shimkus. Thank you very much. We are happy to have
2653	you.
2654	Last is Mr. Eric Olson, senior director of Health and
2655	Food, Healthy People & Thriving Communities Program from the
2656	Natural Resources Defense Council. You are recognized for 5
2657	minutes.

STATEMENT OF ERIC OLSON

Mr. Olson. Thank you Mr. Shimkus and thank you Ranking Member Tonko and members of the committee. You just heard about the real-world impacts of these chemicals in our water supplies across the country. In fact, probably every person in this room, every member of this committee has these chemicals in their body. Over 98 percent of the public has these chemicals in their body. I view these as the new PCBs.

Members may remember many years ago that it took an act of Congress, literally, to ban PCBs. We are very concerned that this is a very broad class of thousands of chemicals that have not, frankly, been meaningfully regulated. We have a little bit of action on a couple of them, but the vast majority there has been virtually nothing done at the federal level in most states.

I also want to say that we know that there is six million people from a Harvard study that are drinking two of the PFASs in their water at levels above EPA's action level. Six million people. When those numbers come down as a previous questioner suggested, there are going to be a lot more people that are shown to have excessive levels of these chemicals in their water supplies. It is going to happen, I

guarantee you, in every single state, probably in most congressional districts.

As we get the new data coming in we are going to see this across the country. These impacts we heard about a variety of them. They include cancers of the kidney, cancer of the testicles, other adverse effects including immune system impacts, impacts on the thyroid, impacts on fetal development.

And I just want to share a story that I -- I just got a phone call yesterday from a citizen who is in Cape Fear, very similar to the story that you just heard, and she had actually lost her baby. She found out afterwards that she had been drinking excessive levels of these chemicals in her water. She was a marathon runner. She routinely drank a lot of the water.

She wants to know, what are the impacts of the people in her community? What does she tell her kids? What does she tell the rest of the community? There are 11,000 people in her organization and I know Ms. Donovan's group has a lot of members really trying to fix this problem. It is across the country. We need action. And I ask that a letter that has about 50 groups signed on to it asking for action be entered into the record which addresses some of the needs.

2704 There are obviously concerns about setting an EPA 2705 drinking water standard. We would like to see EPA move 2706 forward. Unfortunately the Agency has known about this 2707 problem for more than a decade and hasn't even made a 2708 determination that a standard is necessary. And I didn't 2709 hear EPA commit to making a determination in the earlier 2710 testimony today. 2711 I don't think we got a commitment from the Agency to 2712 even determine that a standard needs to be made. And as we 2713 heard earlier, even where EPA makes such a determination 2714 which they did for perchlorate, the only chemical in 22 years 2715 under the Safe Drinking Water Act 1996 amendments that EPA 2716 made a determination, EPA is still a decade later has not 2717 even proposed a standard. 2718 In addition, obviously in addition to a standard, we 2719 need states to be taking action because EPA isn't going to be 2720 doing anything very quickly. States need to be stepping into 2721 the void. Some states are doing it, New Jersey, Vermont, New 2722 York, California, other states are looking at action. 2723 need to stop the further contamination. 2724 We need to have cleanup standards. We need to have a 2725 phase-out of the uses that are causing all this 2726 contamination. We need polluter pays requirements so that

2727	the polluters are paying to clean up, not citizens who have
2728	contaminated drinking water. Why should they have to pay for
2729	the cleanup? It really ought to be the polluters paying for
2730	it. We need an authority for citizen action, for medical
2731	monitoring and enforced cleanup.
2732	We also need, clearly, action on food uses of these
2733	chemicals. Your pizza boxes, a lot of your other food
2734	packaging contains these chemicals in them. You are being
2735	exposed through your food and we need to take action to
2736	address those. And, in addition, we clearly need EPA to take
2737	action under the Clean Water Act and the Toxic Substances
2738	Control Act to address new uses and new PFASs.
2739	And, finally, we certainly need action under the Safe
2740	Drinking Water Act to ensure that we have more funding
2741	through the State Revolving Fund and through a cleanup fund
2742	to start cleaning these problems up before they just causing
2743	nationwide disaster from the public health perspective.
2744	Thank you very much.
2745	[The prepared statement of Mr. Olson follows:]
2746	
2747	*********INSERT 8******

2748	Mr. Shimkus. The chair thanks the gentleman. And now I
2749	will recognize myself for the opening of the round of
2750	questions and I will recognize myself for 5 minutes.
2751	I want to go to Ms. Daniels. Your testimony calls for,
2752	quote unquote, a holistic national approach keying off a
2753	unified message. Why don't you think that the federal
2754	government is doing that right now and are there technical
2755	barriers to it being done that way?
2756	Ms. Daniels. So yes, thank you for that question. So I
2757	think the federal government is doing a better job of it now
2758	but I would argue that I don't think there was much of that
2759	going on for the last 10 years. So I think possibly since
2760	signaling through the summit, you know, action moving
2761	forward, I think they have been doing a better job.
2762	But, for example, I still see the silo effect that we
2763	have between EPA and ATSDR. So why do we have two different
2764	agencies doing essentially the same amount of work or the
2765	same type of work which is risk assessment work, you know,
2766	why aren't those two agencies working together on that very
2767	important topic?
2768	And I think when I see things that EPA is doing, I think
2769	they are probably doing a better job talking to their
2770	counterparts in wastewater and in drinking water, but I NEAL R. GROSS

2771 haven't seen FDA necessarily pull to the table. 2.772 that is a partner that has sort of been missing at least from 2773 my perspective. So I think they are doing a better job since 2774 May, you know, that I don't think that was happening much 2775 before that. 2776 And I think so there has been a lot of conversation 2777 about the UCMR rule, you know, to me if a chemical reaches 2778 the level where it is going to be part of the UCMR rule, way 2779 back in those phases folks should already be looking at how 2780 to reach out to the other groups that have a part in this. 2781 So why didn't we have standards from wastewater and waste 2782 back then, because it is natural for states to want to try to 2783 find where those things are coming from and we still don't 2784 have standards in those areas. 2785 Mr. Shimkus. So just for correction, I kind of use the 2786 word technical for a reason, but you kind of explained more 2787 administration and legal hurdles. I mean just leadership, I 2788 am a big leadership guy and someone has to be in charge and 2789 someone has to keep people, so that is really your response 2790 is more legal and administrative. Ms. Daniels. Well, there are some technical challenges 2791 2792 too. So in drinking water we can take action with an MCL. We can take action with a HAL. In Pennsylvania, our 2793

2794 wastewater folks are having a challenge addressing PFAS and 2795 discharges because some of them can represent, recognize a 2796 HAL but others need an MCL or a water quality standard in 2797 order to take action. And in our waste program we have the 2798 luxury that they can recognize a HAL as well but not all 2799 states can do that. 2800 So there are different trigger levels for these 2801 different agencies in terms of when they have authority to 2802 take an action and that is where we have some inconsistency. 2803 Mr. Shimkus. Let me go to Mr. Burman. What technical 2804 or economic barriers that states face with respect to 2805 responding to PFAS contamination? 2806 Thank you, Mr. Chairman. For the states 2807 from the cleanup perspective, the biggest challenge, really, 2808 is the uncertainty about which of these compounds do we 2809 really go after. They do not occur as just PFOS and PFOA in 2810 It is a mixture and states are rapidly finding isolation. 2811 more and more of these. 2812 The question is in the absence of established and formal 2813 health standards which ones should the state focus on, how do 2814 you sample for them, and how do you clean them up. So there 2815 is a lot of uncertainty about the nature and occurrence, 2816 standards, and just the basic fundamental nuts and bolts of

2817 how do you sample for them, how do you detect them, and what 2818 technologies can really get them out of water and soil. 2819 Mr. Shimkus. So what are states and territories doing 2820 to address the uncertainties that you just mentioned? 2821 Mr. Burman. Thank you, Mr. Chair, for that question. 2822 And as in my previous testimony, what is happening is states 2823 are driven by what they are finding and they are evolving 2824 their own risk assessments and they are coming up with, in 2825 some cases, promulgated standards and in some cases values 2826 for additional PFAS. 2827 A lot of states now, I shouldn't say a lot, but a 2828 handful of states have another six to eight PFAS that 2829 commonly have standards now and states are finding another 2830 dozen or two dozen commonly in soil and water. So that has 2831 been the biggest, the ability to conduct these contaminants 2832 and to find them has outstripped our ability to actually 2833 offer health advice to people. So that is the biggest 2834 conundrum that states have that they have sort of created for 2835 themselves by the drivers that they have to go out and find 2836 these because we know they occur. 2837 States are also trying to do the best they can with 2838 remediation technologies. It is a lot of, frankly, old school technologies that are coming back. 2839 It is your basic

2840	excavation and putting them in landfill, capping them,
2841	incinerating them, and for groundwater, really, activated
2842	carbon, old, you know, solid old and tried technology. These
2843	are all that is really available to the states.
2844	But there are efforts to try and find some more cost-
2845	effective methods that are happening at the states, again
2846	driven by the need that they have.
2847	Mr. Shimkus. Thank you much. I am going to end there
2848	in lieu of time, but it was just a point that I was going to
2849	follow up with Ms. Isaacs is that I am wondering with the
2850	czar aspect, czarina aspect, do you have I am not going to
2851	give you time to answer because of my limited time, but is
2852	that working better than, you know, because you have got all
2853	the agencies of Michigan together and you are like, I can
2854	tell, the marching them in a certain direction.
2855	So we will talk later or we will add that to a question
2856	for the record. I now yield 5 minutes to the ranking member,
2857	Mr. Tonko, for 5 minutes.
2858	Mr. Tonko. Thank you, Mr. Chair. And thank you to our
2859	witnesses for what are very powerful testimonies that you
2860	shared, so much appreciated.
2861	A lot of discussion with the previous panel about
2862	designating a hazardous substance with the PFOAs and PFOS.

2863 What in your determination, and I will address this to Ms. 2864 Daniels, Mr. Burman, and Ms. Isaacs because of your 2865 relationship with the respective states, what would the 2866 impact on states be if EPA were to determine PFOA or PFOS as 2867 a hazardous substance under CERCLA? 2868 And I heard some of Mr. Burman's comments about that but 2869 in a more direct way what would states be enabled to do? 2870 Mr. Burman. Thank you, Mr. Tonko. For states that 2871 would probably be the single biggest impact because it would bring the full weight and power and formality of CERCLA to 2872 2873 bear on this contaminant. We have heard Ms. Sullivan talk 2874 about DOD using the CERCLA process. We commend you in doing 2875 that but it is essentially almost a voluntary process and 2876 very few responsible parties are voluntarily going to choose 2877 to apply a CERCLA-like process to this contaminant. 2878 having CERCLA formally being introduced to the playing field 2879 would take care of that. It would provide a consistent 2880 framework that has been perfected for almost 40 years. 2881 Now having said that this subcommittee has held hearings 2882 on modernizing Superfund and that is always, you know, there 2883 is always room for improvement, but the baseline that CERCLA 2884 would provide would enormously contribute to stripping of the 2885 lot of the uncertainty both in terms of the technical aspects

2886	and the policy aspects that currently states face.
2887	Mr. Tonko. Anyone else want to add to that?
2888	Ms. Isaacs. Yes. Michigan, in full partnership with
2889	EPA, it would provide an additional tool that we could use
2890	together in looking at holding responsible parties
2891	responsible. We currently are working with the EPA on
2892	enforcement actions. If we had this new tool it would be
2893	more effective, I think, and might not need to go to court
2894	often if we had established processes that everyone knows
2895	about.
2896	Mr. Olson. Mr. Tonko, may I speak to that just briefly?
2897	Quickly, without having these chemicals listed under
2898	Superfund, CERCLA, there is a real problem that an
2899	obstreperous defendant will simply refuse to clean up. And,
2900	you know, just listing two of them may help at some sites,
2901	but as you just heard there are actually dozens of these
2902	showing up. So there needs to be a broader designation that
2903	would cover a broader array of PFASs.
2904	Mr. Tonko. And, Ms. Daniels, quickly, if you could just
2905	share a little more.
2906	Ms. Daniels. Sure. So in Pennsylvania we can use a
2907	health advisory for our cleanup folks to take action, but I
2908	think in other states that determination would be very NEAL R. GROSS

2909	helpful. The only other thing I wanted to mention is we
2910	don't always find a responsible party for all of these sites.
2911	We have two right now working in Pennsylvania that we have no
2912	idea where it is coming from. So right now the cost of that
2913	cleanup is certainly being borne by the state, so just keep
2914	that in mind.
2915	Mr. Tonko. Thank you.
2916	And, Ms. Donovan, if I could go to you, I know we spent
2917	a lot of time focusing on PFOA and PFOS. Those are the
2918	contaminants that I am most familiar with in my home state of
2919	New York. But we know that there are thousands of similar
2920	and toxic variants like GenX. How important is it for EPA to
2921	evaluate and provide meaningful risk information to take
2922	regulatory action on PFAS more broadly?
2923	Ms. Donovan. Well, I think North Carolina is the
2924	perfect example where there is nothing. There is still no
2925	information. There is no risk assessment for GenX. And GenX
2926	again was just 12 percent of the total of PFAS that were
2927	detected. Right now, North Carolina is looking at, I believe
2928	DEQ said 25 different PFAS.
2929	These chemicals are also byproducts as well and I think
2930	that is important to understand. When we don't have any
2931	information, we don't know how to assess them and address

2932	them so they don't get talked about. And I think that has
2933	been a big letdown to the community and to the American
2934	people is that we know they are there, the scientists can see
2935	them. But the scientists don't have test standards for them
2936	so the scientists can't come back to public officials and
2937	tell them accurately this is how much is in the water.
2938	And then EPA with test standards could begin rodent
2939	toxicology studies and give us those risk assessments on the
2940	PFAS that we are looking for. So I think it is really
2941	important for us to consider requesting that the EPA begin
2942	doing rodent studies on all of the PFAS, but they can't do it
2943	until they get test standards. And those test standards come
2944	from the manufacturers because they know exactly what they
2945	are making. They know what chemical byproducts are coming
2946	out too.
2947	So if we had all of that information and could start the
2948	process there that would have really helped North Carolina
2949	move along a lot further than we are right now, because we
2950	have wasted a lot of time.
2951	Mr. Tonko. Thank you. With that I yield back. I have
2952	exhausted my time so.
2953	Mr. Hudson. [Presiding.] I thank the gentleman. At
2954	this time the chair will recognize himself for 5 minutes for

2956 I would like to first again to thank Ms. Donovan for 2957 being here, very compelling testimony. Appreciate you 2958 sharing your personal story and the story of our neighbors. 2959 And, Ms. Isaacs, I was encouraged reading your testimony 2960 and hearing from you today. I think one of the underscores I would like to make is the bipartisanship that we have seen in 2961 2962 Michigan that I believe we see in North Carolina that I think 2963 is very important here. This is not a Republican or Democrat 2964 It needs to be bipartisan. We need a bipartisan 2965 approach and that is something that in North Carolina we have 2966 certainly tried to do. 2967 You state that your state is one of many that has 2968 adopted guidelines or guidance values or standards for PFOS 2969 and PFOA chemicals based on the EPA's toxicity value and the 2970 EPA-issued 2016 health advisory level. Was there any 2971 information that was missing from the toxicity value for 2972 health advisory level that hindered your ability to develop 2973 your own standards in Michigan? 2974 Ms. Isaacs. We developed our standard at the beginning 2975 of 2018. We did not receive, we requested as everyone else 2976 did, information from ATSDR. The 852-page report did come 2977 out and that is another source of information that informs

2955

a question.

2978	us. When you are a state and you are looking to set a
2979	standard of course you are having your own scientists review
2980	the information. You are looking at the toxicology report
2981	from ATSDR. You are looking at the lifetime health advisory.
2982	You are putting it all together and you are trying to
2983	determine the most protective standard for your people.
2984	We know it has changed. We know it changed in '09, we
2985	know it changed it '16, and now we have new information. So
2986	this evolving contaminant and the research evolves, clearly
2987	we would like more research. And we are actively engaged at
2988	looking at the correct standard for Michigan. So did we need
2989	more information? We did, and we did get more information
2990	and we think still yet there is more to come.
2991	And we realize that there are many analytes, but I think
2992	we are focused on the ones that would produce the most risk
2993	to our public health, sir. Thank you very much.
2994	Mr. Hudson. Thank you. Ms. Daniels and Mr. Burman
2995	Ms. Donovan. I am sorry, can I interject?
2996	Mr. Hudson. Briefly, a little bit of time here.
2997	Ms. Donovan. Okay. I think there is a misconception
2998	and if you look at the statement you will see that we have no
2999	idea what is considered highly risk and not at risk. Short-
3000	chain, I think EPA is working under the assumption that

3001	short-chain chemicals, PFAS, are not as toxic as long-chain.
3002	However, you have to use more short-chain.
3003	So we have no idea at higher levels, higher quantities,
3004	they are still acting the same way in the body it just takes
3005	more of them and we are finding more of them in our water in
3006	North Carolina. So I don't think we can decide to catalog
3007	that a couple are more toxic than others, we simply don't
3008	know. There are zero scientific information to prove that
3009	some are less toxic than others at the moment. Thank you.
3010	Mr. Hudson. Okay, appreciate that. Ms. Daniels and Mr.
3011	Burman, you are both responsible for cleanup and remediation
3012	of these chemicals and I appreciate your testimony. Based on
3013	your experiences, once the toxicity value is released does
3014	that give states enough information to develop a cleanup
3015	plan?
3016	Ms. Daniels. So I can tell you in Pennsylvania we need
3017	a health advisory level, so we need that number and we need
3018	EPA to establish that number for us to be able to take
3019	action. A tox value doesn't give us what we need from our
3020	legal authority.
3021	Mr. Hudson. Mr. Burman?
3022	Mr. Burman. Thank you, Mr. Chair. What I can tell you
3023	is from the perspective of the states it varies. Some states ${\bf NEAL\ R.\ GROSS}$

3024	have robust public health agencies who can take that tox
3025	value and come up with a state number for it, but then the
3026	problem even for those states is in the absence of that being
3027	a federal number can they really apply it.
3028	A lot of states simply do not have the resources to take
3029	the EPA baseline information and create their own values so
3030	they are reliant entirely on a federal value.
3031	Mr. Hudson. Got you, I appreciate that.
3032	Ms. Daniels, during the first panel today, Dr. Grevatt
3033	from EPA mentioned the states could use their SRFs if they
3034	choose to address PFAS contamination. Do you know how many
3035	states already do this?
3036	Ms. Daniels. So, thank you for the question.
3037	Absolutely states can use it, but there is tremendous, I
3038	guess, work that needs to be done in lots of different areas.
3039	So you are also competing with projects for lead, projects
3040	for aging infrastructure. I think folks will be moving
3041	forward with new treatment for hazards. There is a whole
3042	list of things that that money needs to address.
3043	So yes, PFAS is just one more of those things that could
3044	be used for projects. In Pennsylvania we have one
3045	application in-house right now for somebody that wants to
3046	install treatment for PFAS.

3047	Mr. Hudson. But you are not for sure how many other
3048	states are actually
3049	Ms. Daniels. No, but we would be glad to do a survey
3050	and get back to you on that one.
3051	Mr. Hudson. That would be great.
3052	Ms. Daniels. Absolutely.
3053	Mr. Hudson. If you could report that back for the
3054	record I think that would be important for us to know. I
3055	really appreciate that.
3056	As my time has expired, I will now recognize the
3057	gentlelady from Michigan, Ms. Dingell, for 5 minutes for her
3058	questions.
3059	Mrs. Dingell. Thank you, Mr. Chairman. I have a lot of
3060	questions so I am going to ask you to be concise. As we have
3061	discussed, Michigan has 35 sites that have already been
3062	identified. I know that you are really leading the effort
3063	with the state of Michigan as one of the states that is doing
3064	more than anybody does but we need to be doing a lot more.
3065	I want, in your testimony you state that Michigan
3066	supports establishing a national standard for PFAS. Briefly,
3067	can you state the benefits of setting that standard and is
3068	there a specific standard that the state of Michigan would
3069	like to see set for PFAS chemicals and do you think that

where the national standard is now is where it should be?

Ms. Isaacs. I think that I have seen the movement by

EPA to change this. If we look into '09 it was 400 and 200.

We look in '16 it came down to 70 parts per trillion combined for those two long-chain PFAS. And again we see now ATSDR having a new focus on research that now brings children into this issue and we are looking at the effect on children.

Minimally, we need to take into consideration a standard that addresses children.

So yes, we have asked EPA to set that standard and more than that we have asked them to work with ATSDR so that we can coordinate the health assessment along with EPA's enforceable cleanup standards for the states.

Mrs. Dingell. Thank you. I want to go to the most recent, Parchment, in Fred's district, or Mr. Upton's district, and the Huron Valley watershed. One of my concerns is that there have been three announcements now in the last 6 weeks about not eating fish and it has gradually gone down river to Lake Erie. But my understanding is that the first fish was actually caught in May of 2017, put in a freezer and was not tested until very recently and so it was 16, 18 months later that the do not eat fish announcement was put out.

3093 Why did that happen, do you have the resources you need, 3094 and how do we make sure that we are responding in a more 3095 timely way? 3096 Ms. Isaacs. Thank you so much for that question. 3097 me say that as we moved as rapidly as humanly possible to do 3098 and search out sites of contamination in Michigan we started 3099 to look at doing surface water testing in our rivers that to 3100 inform us if we have sites of contamination bleeding into the 3101 And when we look at fish testing, we added PFAS to river. 3102 our testing a few years ago. We have been testing fish since 3103 1970. 3104 I actually called the lab director at the Health 3105 Department and asked him about the issue that you just asked 3106 me about and he said it is not unusual that we take fish and freeze them. And he also said we have done more than 700 3107 3108 samples this year. They are moving incredibly rapidly. 3109 have been given money from the legislature to expand their 3110 ability to test and they are searching diligently for staff 3111 to be able to handle more testing of water, fish, deer. 3112 And as we have looked at these industrial pretreatment 3113 processes in our water treatment plants and our disposal 3114 plants that affect our waters, we use those areas of 3115 investigation to go back, look at make sure we tested the

3116	fish, make sure we know where the contamination is coming
3117	from. And I will address Huron if you want.
3118	Mrs. Dingell. Well, I mean, I think you will
3119	acknowledge that one took too long and you are trying to make
3120	it quicker. I only have a minute and I have so many
3121	questions, but I think it is really important that people
3122	know it did take that long and you are trying to cut that
3123	time now.
3124	Ms. Isaacs. Yes, ma'am.
3125	Mrs. Dingell. Is Michigan testing for what we have been
3126	talking about today, the GenX?
3127	Ms. Isaacs. We are not testing for GenX. There is very
3128	little known.
3129	Mrs. Dingell. Why?
3130	Ms. Isaacs. We are using two testing methodologies, 537
3131	and an analyte test and that brings us to 24 different
3132	chemicals that we are searching for. You heard that we have
3133	a suite of about 3,000-plus and those two water tests are the
3134	acknowledged tests, 537 requested and required by the EPA.
3135	And the additional test that we run with more analytes, we
3136	run because we get more PFOS.
3137	Mrs. Dingell. I am out of time. I yield back no time.
3138	Mr. Hudson. I thank the gentlelady. I just want to NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS

recognize the gentleman from Michigan, Mr. Walberg, for 5

3140 minutes. 3141 Thank you, Mr. Chairman. Mr. Walberg. 3142 And I would like to start off by adding my welcome to 3143 Ms. Isaacs who is the director of Michigan PFAS Action 3144 Response Team. And possibly as our chairman had indicated, 3145 the czar setting that has taken a more comprehensive look at 3146 what is going on, certainly not with perfection but moving 3147 that direction as much as possible, I am glad that you are 3148 here to talk about the issues facing Michigan and the 3149 comprehensive response Michigan is putting forward. 3150 Mr. Chairman, I would also like to take the opportunity 3151 to thank you and this committee for placing a priority on the 3152 issue by holding this hearing today. Safe drinking water 3153 should never be a worry for any person. I am glad this 3154 committee takes this issue seriously, as has real live people 3155 here too that have had to address it in their families and 3156 communities also. 3157 Unfortunately, Michigan is no stranger to a water 3158 The current PFAS situation impacting Michiganders is 3159 one that most certainly should be taken very seriously and be 3160 handled with all hands on the deck approach. I want you to 3161 know, Ms. Isaacs that I will continue to work with you and

3139

the state of Michigan and my colleagues to tackle this issue in any way possible. Safe drinking water is critical and the current PFAS issue facing Michigan ought to wake us up across the nation and still further.

Let me ask this question, Ms. Isaacs. Can you explain how the state of Michigan is addressing and approaching the current issue in Michigan and specifically what do you consider to be the most important features of the way our state is addressing this situation including maybe talking about the so-called czar status approach.

Ms. Isaacs. Yes. The structure of combining ten state departments, you know this from your own federal level of government that bringing those departments together is sometimes different, sometimes difficult, different cultures. When you bring them together under an umbrella it is placed out of the Governor's Office and you have this intense communication. It makes everything quicker, everybody understands the issue.

Ten state departments that talk multiple times a week is a structure that is so unique that we have been able to accomplish amazing things in 9 months. And what characterizes this as different isn't just the organizational structure put in place by Governor Snyder. That is unique

3185 and effective, but when we strategize to look at everything 3186 at once. 3187 If you are looking at landfills and you are looking at 3188 wastewater treatment plants and you are doing surface water 3189 testing and you are testing every single public water supply 3190 in addition to private wells, and we have almost a million of 3191 those, you are so comprehensively reviewing your entire state 3192 knowing what your situation is, mitigating against the public 3193 health risk, and then addressing the remediation of how we actually fix this. 3194 3195 It is characterized by being a comprehensive, very quick 3196 heavy lift of what is the situation in our state, again 3197 cannot be done without the support of our legislature and our 3198 Congress. I am grateful for all of the work that all of you 3199 have done. 3200 Mr. Walberg. Almost a Marshall Plan approach, isn't it? 3201 Not reinventing the wheel but all working toward the same 3202 outcome and hitting all the bases. Is it replicable in other 3203 states? 3204 Ms. Isaacs. It is. It is. And our Governor wants us 3205 to do protocols, best practice, and he wants us to share that with the rest of the nation. And we would like to help any 3206 3207 other state. We will provide any information. And we are

3208	working with our sister states and they are all doing good
3209	work.
3210	Mr. Walberg. Have you had any issue in coordinating a
3211	response with the EPA? What might that be if there were?
3212	Ms. Isaacs. We engaged in this in full partnership with
3213	ATSDR and with EPA. We maintain that. We continue that.
3214	And we do appreciate that partnership because they are very
3215	much needed. Again national issue, states can't do it alone
3216	and they certainly can't control everything so we need our
3217	federal partners.
3218	Mr. Walberg. But they are coordinating with you well?
3219	Ms. Isaacs. Yes.
3220	Mr. Walberg. How would you characterize your
3221	cooperation with affected communities? What can we learn?
3222	Ms. Isaacs. I would assume you mean our cooperation in
3223	communication. Part of what makes this effort successful is
3224	the transparency and the intense communication. We will
3225	communicate with our, any community that is really being
3226	tested. We want them to understand what this means. We want
3227	to address their concerns because they have them and they are
3228	really legitimate. We will do two to three community
3229	meetings. They will range from 15 people, I think the
3230	largest one we have had is 1,200 people. We will stay and we NEAL R. GROSS

3231	will answer individual questions and we will allow people to
3232	come to the microphone for as long as they want. We think
3233	that is absolutely essential.
3234	I want to say that Michigan has always wanted the EPA to
3235	come in and we want them to hear what we have been hearing
3236	from our communities. We want them to hear the process of
3237	what the people think. So I am not involved in that
3238	negotiation, I am understanding that it is logistical and
3239	that is still certainly going forward. So Michigan has
3240	always wanted EPA to come in and we look forward to that.
3241	Mr. Walberg. Thank you. I yield back.
3242	Mr. Hudson. The gentleman's time is expired. I want to
3243	recognize the other gentleman from Michigan, Mr. Upton, for 5
3244	minutes.
3245	Mr. Upton. Thank you, Mr. Chairman, and again I
3246	appreciate all the witnesses here on the panel as well as
3247	obviously the first panel. You know, and I particularly want
3248	to thank my Michigan colleagues here, Debbie Dingell and Tim
3249	Walberg, Chairman Shimkus and Walden for allowing this
3250	hearing to go forward. You can tell that there is quite a
3251	bit of interest to try and fix this problem not only in
3252	Michigan but around the country.
3253	And I guess as I reflect back on the last 5 or 6 weeks NFALR. GROSS

there was a term that our local sheriff used, Rick Fuller, that this is Team Kalamazoo. We got a problem and we have got to deal with it and let's take all the barriers down, partisan barriers, governmental barriers and let's work together.

And as Governor Snyder said when he has been there on a couple of occasions -- remember, this is a very small town, Parchment -- this is a textbook example of about how we ought to work together. And as I talked to many of the residents delivering the water as they came to not only the high school but the church, people appreciated that. I didn't see a single disgruntled person. They recognize that there was an issue, on the short term we are going to roll up our sleeves and deal with it.

And we have got a long-term problem as well, but again I am convinced that we are going to work on this as well. And, you know, frankly that was a big lesson that we learned from Flint. There were, you know, a finger could have and was pointed at all units of government and it was Dan Kildee, the congressman from there, myself, Debbie Dingell, Tim Walberg, and others, our senators that worked together to change the standard that forced EPA to acknowledge that they have got to be involved from the get-go from day one, and again that was

my first question when we learned about Parchment.

Votes are starting here on the House floor.

A question I guess that I have for you, Ms. Isaacs, and again thanks for your work. You have been there a good number of times over the last couple of weeks. We have chatted on the phone. We have met in my office. You helped as we talked about my letter that we had sent back on August 1st. We want to help the citizens everywhere where this can be identified.

And how frustrating was it for you to sit in the first row knowing that now we have these draft numbers, this draft report indicating that the numbers could be as high as 53,000 per trillion versus the 70 in terms of the standard? What do we have to do, where is Michigan on this standard at 70, and do you support EPA reviewing it to come down perhaps using the evidence there? How do you deal with an issue like this in terms of the state?

And I guess my last part of my question is I just want to announce to folks that I have been working with staff and with again my able colleagues, Dingell and Walberg, to introduce legislation that I hope to be able to introduce next week to include federal facilities dealing with PFAS so that everybody is on the same page.

3300	I have talked to the chairman, Mr. Walden. I would like
3301	to see this legislation move in this Congress to get to the
3302	President's desk. Again I think we could see some strong
3303	bipartisan support to certainly move it out of this committee
3304	and into the floor and talk to the leadership. So look for
3305	that as a long-term issue.
3306	But back to my question before my time expires. How
3307	frustrating is it to you to see these results that we frankly
3308	feared? We suspected when the numbers didn't come out right
3309	away that we suspected that they may be way above the 70
3310	parts per trillion. What is the state's response to this?
3311	Ms. Isaacs. Well, we would characterize our response to
3312	that is that we are very disappointed in the pace of the DOD
3313	and bases to respond to testing. I know they have been asked
3314	and that was the right thing that they were asked by the DOD
3315	to test, but the response rate is slow. And that means to
3316	me, if I don't have results on a base then I am going to
3317	initiate testing around the base because I don't want to risk
3318	and wait for results, and I have done that multiple times
3319	already.
3320	What I mean as testing, I am looking at exposure in
3321	private drinking wells and I wish that the pace was faster.
3322	I know they are obligated to use CERCLA, but there are no

3323	timeframes for those eight steps and you can remain in the
3324	investigation stage of CERCLA for a very long time. And so I
3325	would encourage them as I do, I do encourage them personally
3326	on the phone, we really need your results. I often hear that
3327	the bureaucracy is large and it takes a long time to get
3328	things through the system. I actually understand that. They
3329	don't have an MPART process.
3330	And so we are still in partnership because we need to
3331	be. We need to get the bases unified in the state to
3332	understand where water flows, geology, output. Those results
3333	help us determine if we need to test a river, we need to test
3334	for public health issues. So it is important to us that we
3335	get the results in a timely manner.
3336	Mr. Shimkus. The gentleman's time is expired. There
3337	are votes on the floor. I would like to turn to the
3338	gentleman from Texas, Mr. Green, for 5 minutes.
3339	Mr. Green. Thank you, Mr. Chairman. I will be very
3340	quickly because I know we also have markups sometime
3341	scheduled at 1:00.
3342	Mr. Shimkus. Well, then just don't ask any questions
3343	and we can move forward.
3344	Mr. Green. Well, Mr. Olson, in your testimony you state
3345	that data shows that PFAS chemicals can have adverse health NEAL R. GROSS

3346	effects at low per trillion levels. At what level
3347	specifically is there evidence of health effects and how does
3348	that compare to the EPA's nonbinding 70 parts per trillion
3349	level?
3350	Mr. Olson. Briefly, I was relying primarily on the
3351	ATSDR report, which is part of the Centers for Disease
3352	Control and Prevention, which would suggest that levels down
3353	in the single digit parts per trillion can have adverse
3354	effects. And I think the more we learn, the more we are
3355	finding that these effects occur at very vanishingly low
3356	levels.
3357	Mr. Green. I think we have some commitment from some
3358	legislation, but should the Safe Drinking Water Act be
3359	amended to require the EPA to act within a certain timeframe?
3360	In fact, I will ask everybody on the panel. Just say yes or
3361	no.
3362	Mr. Olson. Yes. And we would like to see the standard
3363	setting strengthened so that it can be done quickly rather
3364	than take 10 years.
3365	Mr. Green. Yeah.
3366	Ms. Donovan. Yes, agree.
3367	Ms. Isaacs. Yes, agree.
3368	Mr. Burman. Yes. NFALR GROSS

3369	Ms. Daniels. Yes, and it has to be less than 10 years.
3370	So I agree with that.
3371	Mr. Green. Okay. Ms. Donovan, could you tell me how
3372	the residual PFAS contamination has affected your community?
3373	Ms. Donovan. It has left us with uncertainty and
3374	distrust. The issue that is happening in North Carolina is
3375	it has been very difficult to get the states to rein in the
3376	Chemours. They have spilled many times and we have issued
3377	notice of violations many times. If there had been stronger
3378	guidelines from the federal level I think we would have been
3379	able to act quicker and we could have had swifter justice.
3380	I think we also in our situation have no information
3381	whatsoever. Everything that we are dealing with are
3382	chemicals that the federal government has not given any
3383	guidance on. So we are going it alone and we are figuring it
3384	out on our own and it has been incredibly time consuming in a
3385	state that is actually incredibly divided politically which
3386	has also mired us in some of this issue.
3387	So I am really grateful that you are taking the
3388	bipartisan approach and I would love for our state
3389	legislatures to follow suit.
3390	Mr. Green. Thank you. Well, I am from Texas and I
3391	understand. Mr. Chairman, I yield back my time.

3392	Mr. Shimkus. The gentleman yields back his time.
3393	Seeing no other members present, we would like to thank
3394	our second panel. We know this is a challenging issue but we
3395	are trying to figure it out as much as many of us are.
3396	Before I conclude I would like and ask unanimous consent
3397	to submit the following documents for the record: A letter
3398	from the National Groundwater Association; a letter from
3399	Culligan International Company; a letter from several groups
3400	including Safer Chemicals, Healthy Families; a letter from
3401	Purolite; a letter from the Water Quality Association.
3402	I also have a letter from a guy named Fred Upton from
3403	Michigan; another letter from, well, by numerous members to
3404	the Acting Administrator of the EPA Mr. Wheeler from Kildee,
3405	Boyle, Dingell, Lawrence, Upton, Bergman, and Fitzpatrick; a
3406	letter from the State of Michigan Executive Office to the
3407	Acting Administrator of the EPA from the Governor of
3408	Michigan; and finally, also from the Governor of Michigan to,
3409	it looks like the Secretary of Defense from the Governor of
3410	Michigan.
3411	Without objection, so ordered. The hearing is now
3412	adjourned.
3413	[Whereupon, at 1:07 p.m., the subcommittee was
3414	adjourned.]